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**Sacramento Valley Water Quality Coalition**

**Nitrogen Management Plan Summary Report  
2016 Crop Year**

Prepared for  
**Central Valley Regional Water Quality Control Board**

Prepared by  
 **LAND IQ**

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## EXECUTIVE SUMMARY

Subwatersheds within the Sacramento Valley Water Quality Coalition (SVWQC) (Coalition) collected Nitrogen Management Plan Summary Reports (NMP Summary Reports) for the 2016 crop year that were sent out to SVWQC members within high vulnerability areas (HVAs). The individual Subwatersheds assembled member data and submitted aggregated data for further analysis. A total of 1,440 NMP Summary Report survey forms were sent to members with parcels in HVAs of which 1,231 forms were returned. As described fully in Section 2.2, the returned forms were reviewed and checked for errors and omissions, and members were contacted to correct any noticeable errors. This was the first year of NMP Summary reporting. While significant effort was made to correct all errors, some errors may have gone undetected.

Summary statistics (min, max, percentiles, and outliers) for applied nitrogen (N) to yield (A/Y), applied N to N removed (A/R), and applied N minus N removed (A-R) values were calculated by crop for each township and range (T-R) block and for the whole Coalition. Additional statistical analysis of soil type and irrigation type (as identified in member Farm Evaluation Surveys) effects on outlier status was also completed. Results indicated several townships had a small number of records which limited the relevance of the statistical analysis and/or actual applicability of the outlier determination. Some A/Y values were outliers in an individual township but near average when compared to the overall Coalition. The soil and irrigation statistical analysis was limited by sample sizes, but did not show any significant effect of these factors on the frequency of outliers across the Coalition. Overall, the scale of the analyses (township level) and the possibility of member reporting errors limited the ability to interpret outlier status in most cases.

Results were provided in individualized summary reports to each member in the fall of 2017 as part of the Coalition's education and outreach program. The individual NMP summary reports provide member growers with information on the status of A/Y and A/R values for each of their parcels relative to the township in which they reside.

# 1 INTRODUCTION

The Central Valley Regional Water Quality Control Board (RWQCB) developed the Long Term Irrigated Lands Regulatory Program (LTILRP) to address surface water quality and to add new groundwater quality monitoring and reporting requirements for agricultural irrigated land. The new requirements were adopted as Waste Discharge Requirements (WDRs) and an associated Monitoring and Reporting Program (MRP). The Sacramento River Watershed WDRs for members of the SVWQC were adopted March 12, 2014. The requirements for reporting and monitoring specified in the WDR are dependent in part on whether an operation is within a high or low vulnerability area, based on threat to groundwater quality.

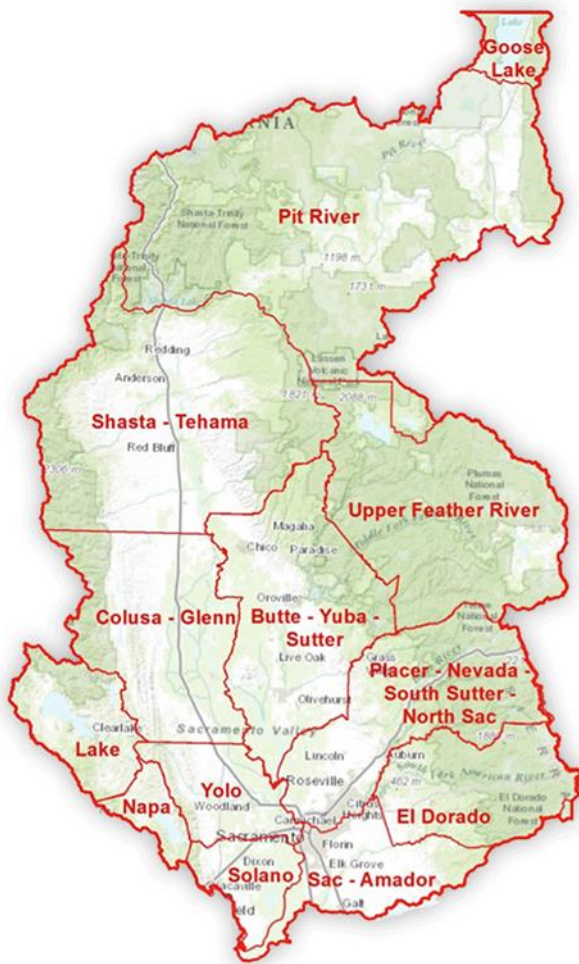
High vulnerability areas (HVAs) for the Sacramento River Watershed were identified in the June 2014 Groundwater Quality Assessment Report (GAR) completed by CH2M. Under the WDRs, growers in HVAs are required to prepare and implement a Nitrogen Management Plan (NMP) and a NMP Summary Report annually. SVWQC is required to summarize SVWQC member N data to fulfill WDR requirements for the Coalition's Annual Monitoring Report. This summary as detailed in Section 1.2, requires the following: "At a minimum, the statistical summary of nitrogen consumption ratios by crop or other equivalent reporting units and the estimated crop nitrogen needs for the different crop types and soil conditions will describe the range, percentiles (10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, 90<sup>th</sup>), and any outliers."

This report satisfies Report Component No. 19 – Summary of Reported Nitrogen Data of Attachment B of General Order No. R5-2014-0030-R1. Report Component 19 directs that, "The third-party shall aggregate information from Members' NMP Summary Reports to characterize the input, uptake, and loss of nitrogen fertilizer applications by specific crops in the Sacramento River Watershed." Results are presented for A/Y, A/R, and A-R (where R values are established) for each T-R block and for the whole Coalition including a summary of ranges and percentiles (10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, 90<sup>th</sup>) and number of outliers. In addition, results are reported from an evaluation of the effects of soil type and irrigation practice on N consumption ratios.

The Coalition also reported back to the member, separate from this report, A/Y and A/R estimates for each of the member's parcels compared to other growers of the same crop in their township.

## 1.1 BACKGROUND

The area covered by the SVWQC's WDRs encompasses all of the Sacramento River Watershed; however, the data in this Report only covers the Valley floor portion of the SVWQC with designated High Vulnerability Areas (HVAs). The SVWQC is operated as a partnership between 13 local subwatershed groups coordinated by the Northern California Water Association (NCWA) (Figure 1). The subwatershed organizations provide leadership for grower outreach and education about the importance of implementing practices protective of surface and groundwater quality, while NCWA, the third-party recognized by the Regional Water Board, manages development and implementation of surface water monitoring, annual reporting, and other Coalition deliverables, such as this Report. Irrigated agriculture of the SVWQC extends over 1.3 million acres, roughly 8% of the Sacramento River Watershed (excluding rice, which is covered under a separate RWQCB order). The remaining approximately 92 percent of the Sacramento River Watershed consists of open space, riparian vegetation, and urban development.



**Figure 1. Subwatersheds within SVWQC.**

Only 7 of the 13 SVWQC subwatersheds contain HVAs as identified in the June 2014 GAR (Solano; Yolo; Sac-Amador; Colusa-Glenn; Butte-Yuba-Sutter; Shasta-Tehama; and PNSNS) (Figure 2). The GAR evaluated land use in conjunction with soils and agronomy information and reviewed potential hydrogeologic vulnerabilities to identify practices or physical characteristics that pose a greater risk to groundwater quality impact than other areas. Further analysis then paired these results with groundwater quality data to refine the vulnerability conclusions. The vulnerability analysis was performed at the section level (1 mile square) for each Public Land Survey System (PLSS) section.

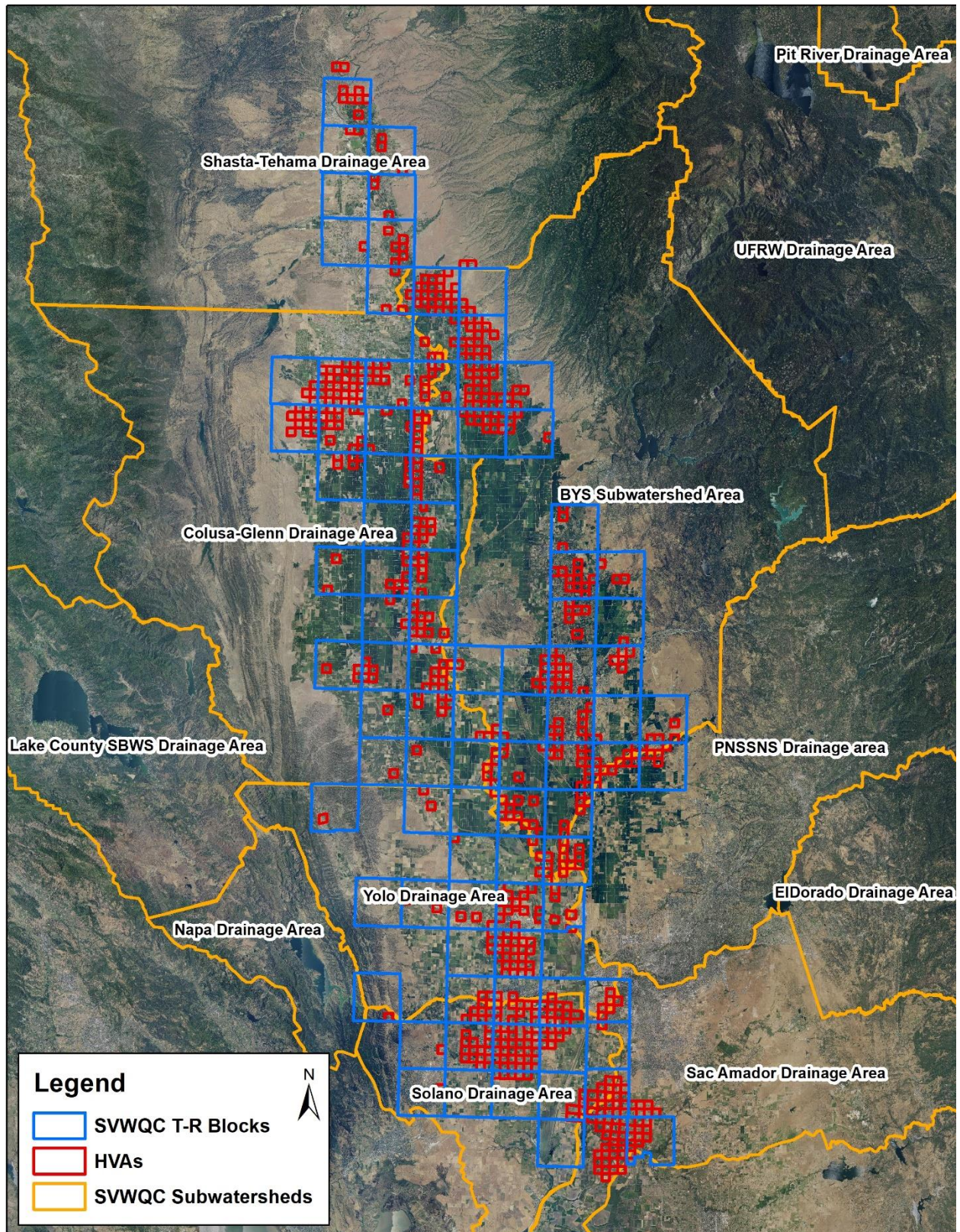


Figure 2. SVWQC HVAs – June 2014 GAR.

## 1.2 PURPOSE

The purpose of this report is to summarize SVWQC member N data to fulfill the following WDR requirements for the Coalition’s Annual Monitoring Report:

**Table 1. Summary of Order Requirements for Member Reported Nitrogen Data**

Order Requirements – Page 144	
1	Aggregated information from members’ Nitrogen Management Plan (NMP) Summary Reports;
2	An assessment of NMP Summary Report information for, at a minimum, comparisons of farms with the same crops, similar soil conditions, and similar practices (e.g. irrigation management);
3	A statistical summary of nitrogen consumption ratios by crop or other equivalent reporting units and the estimated crop nitrogen needs for the different crop types and soil conditions will describe the range, percentiles (10 <sup>th</sup> , 25 <sup>th</sup> , 75 <sup>th</sup> , 90 <sup>th</sup> ) and any outliers;
4	A tabular or graphical presentation of the data approved by the Executive Officer (e.g. box and whisker plot);
5	A quality assessment of the collected information by township (e.g. missing data, potentially incorrect/inaccurate reporting), and a description of corrective actions to be taken;
6	An aggregate of the data submitted by members in an electronic format, compatible with ArcGIS, identified to at least the township level.

Outliers are defined by the RWQCB as any member reporting N data below the 10<sup>th</sup> percentile or above the 90<sup>th</sup> percentile. On the NMP Summary Reports, growers report the total amount of N applied (**A**) (lbs/acre), and **A/Y**, the ratio of total N applied per acre to yield (**Y**) per acre as the indicator of N removed at harvest. Using published values of N sequestration in crop tissue where available (Geisseler, 2016), the Coalition converts A/Y to **A/R**, where **R** is the amount of N removed in harvested plant material. N applied minus N removed (**A-R**) is also calculated for crops with published R values.

## 2 DATA COLLECTION, QUALITY AND ANALYSIS

Grower NMP Summary Report data was collected by each subwatershed within the Coalition, then compiled and analyzed as described below.

### 2.1 SUMMARY OF GROWER DATA COLLECTION

Members reported data at the level of Management Units (MUs) which represents any parcels (APNs) that are managed for nitrate in a similar way. A MU could be one parcel or multiple parcels which may not be contiguous or in the same township. For statistical analysis, each parcel within a MU (MU-parcel) was analyzed separately as discussed in Section 4. Members submitted NMP Summary Reports to the applicable subwatershed which then entered the data into a standardized Microsoft Excel template. A total of 1,440 NMP Summary Reports were sent to members in HVAs of which 1,231 were returned. Several attempts were made by subwatershed staff to contact members with outstanding reports. The



lack of 100% return rate was anticipated given it was the first year of reporting. Management units with incomplete data were omitted from analysis. Additional MUs were also excluded from analysis if the crop was exempt (rice or non-irrigated crop), yield was zero or non-bearing, or the parcel was located outside of a HVA.

**Table 2. Status of NMP Summary Reports Received.**

Member NMP Summary Report Status	No. Reports
Required	1,440
Returned	1,231
Used in Statistical Analysis	1,055

## 2.2 SUMMARY OF GROWER DATA QUALITY EVALUATION

Subwatershed staff initially checked all returned forms for completeness. Complete records included the following information for each MU:

- APN
- crop type
- acreage
- amount of N applied
- production unit
- A/Y ratio

Records missing one of these components were flagged as incomplete and several attempts to contact the grower to correct the mistake were made. Records containing all the required information were compiled and the data was reviewed for accuracy/ errors (as described below). If errors were found growers were contacted via follow-up calls to correct these issues. Common errors identified during the review process included:

1. Grower reported APN did not have a matching APN in the corresponding County GIS parcel layer. These discrepancies typically occurred because of a transcription error or entering the APN in a different format (i.e. without leading zeros). Some discrepancies also occurred where APN lines had been redrawn recently and had not been updated within the County GIS parcel layer.
2. Amount of N fertilizer applied per acre was much higher than typical application values. This could have been the result of a transcription error or reporting total fertilizer applied versus the percent of N in the fertilizer.
3. A/Y ratio was often reported as zero for crops with no yield, which is incorrect. A/Y cannot be calculated in these cases, because division by zero yield is not mathematically possible. For example, in a non-bearing (zero yield) almond orchard with 50 lbs of N applied, the A/Y ratio would be  $50 \div 0$  which has no defined value. A/Y can only equal zero if N applied is zero and yield is greater than zero. For example, in an alfalfa field with 0 lbs of N applied and a yield of 4.5 tons/acre, A/Y is equal to zero ( $0 / 4.5 = 0$ ).
4. Production unit was not correct (i.e. tons was listed but lbs was actually used in calculation) or was provided on a volume basis rather than mass basis (i.e. # of trees, # of flower bunches, square feet of turf, etc.). Corrections from volume to mass basis were made where possible

based on typical values for the crop type (Table 3) (i.e. if yield was listed as # of cartons of oranges and no carton weight was provided, a typical carton weight of 40 lbs was used).

5. A/Y ratio was not correct. This was typically the result of either transcription error, failure to convert yield units to lbs, or incorrectly listing actual yield as A/Y. Typical A/Y values for most crops are less than 1 as yield should be higher than N applied (with the exception of vegetable seed crops or young orchards which are low yielding). Any A/Y values greater than 1 or back-calculated yields that appeared incorrect compared to typical crop yields were flagged for verification.

**Table 3. Estimated Yield Unit Weights for Conversion from Volumetric Units**

<b>Crop</b>	<b>Volumetric Yield Unit Provided by Grower</b>	<b>Estimated Yield Unit Weight</b>
Apples	bushel baskets/acre	40 lbs/bushel
Cherry	lug boxes/acre	20 lbs/lug box
Citrus	cartons/acre	40 lbs/carton
Corn	bushels/acre	56 lbs/bushel
Kiwi	trays/acre	7 lbs/tray
Melon	cartons/acre	30 lbs/carton
Pear	bushel baskets/acre	58 lbs/bushel

Any records with the above errors were flagged and several follow-up calls were attempted by subwatershed staff to contact the grower and make corrections. A large portion of the returned forms required some form of correction, typically for the APN or the A/Y value. Fixing these errors involved a significant amount of effort. Since the member data had to be manually entered into an Excel template, there were several data entry errors that had to be checked. It was common for the grower to calculate A/Y without the yield being converted to pounds. If an A/Y value was believed to be incorrect, the subwatershed staff would review the calculation procedure with the grower to attempt to identify and fix the error. After outreach was completed, the following exclusions were made prior to statistical analysis:

1. Incomplete grower NMP Summary Reports that could not be corrected were excluded.
2. Parcels not intersecting (touching any part of the boundary or falling within) a HVA were excluded as these are not required for the NMP Summary Report.
3. Exempt crops (e.g. rice, non-irrigated pasture or wheat) were removed.
4. All non-bearing or zero yield MU-parcels were not included in the analysis because A/Y, A/R and A-R could not be calculated.
5. Any remaining MUs with A/Y values greater than 10 were excluded from the statistical analysis as these values had an unidentified calculation/reporting error that could not be clarified with the member and would have inappropriately skewed the percentiles and subsequent outlier determination for the remainder of the dataset. A/Y values should generally be less than 1, with the possible exception of seed crops or young, low yielding orchards. Nine (9) total records were excluded with A/Y values ranging from 14 – 570. These A/Y values were several orders of

magnitude larger compared to other similar crops in the coalition due to low yield values of less than 20 lbs/acre which is not realistic for any crop. In a few of these cases the error might have been due to listing an incorrect production unit, but this could not be confirmed with the grower. For the other exclusions this did not appear to be the case and was likely due to an incorrectly calculated A/Y value reported by the member.

Completed records were joined by APN to a GIS parcel layer and associated with a PLSS T-R block (36 square miles) by the centroid (center point) of the parcel polygon using ArcGIS. Some MUs (28 total parcels) had an APN that could not be mapped and therefore the T-R for these parcels is listed as “Unknown”. This could be due to an error in the reported APN or a correct APN that was recently redrawn and had not yet been updated in the county’s GIS parcel layer.

Additional analyses as described below were performed to calculate A/R, A-R, and join grower data to irrigation practices reported on Farm Evaluation Surveys and USDA-NRCS soil information.

### **3 N REMOVED CALCULATION DATA SOURCES AND PROCEDURES**

To calculate **R**, the amount of N removed in the harvested portion of each crop, the Coalition relied on estimates from:

1. Nitrogen concentrations in harvested plant parts - A literature overview (Geisseler 2016)  
[https://apps1.cdfa.ca.gov/FertilizerResearch/docs/Geisseler\\_Report\\_2016\\_12\\_02.pdf](https://apps1.cdfa.ca.gov/FertilizerResearch/docs/Geisseler_Report_2016_12_02.pdf)

This report includes information on N removal values for each crop as shown in Table 4 and includes complete references for studies providing N removal data. A coefficient of variation (CV) is provided which indicates the variability among the published values for a specific crop. The number of published values both within and outside of California is also shown. In some cases, there are several studies that provide N removal values; in other cases, there are only one or two studies. Similarly, for some crops N removal values are reported from various parts of the Central Valley, while for other crops, values may be for other states. The time period when the values were published are presented in the detailed discussion of each crop. While the information in Geisseler (2016) provides several factors to evaluate the relevance of N removal values, they do not give an overall confidence rating or reflect all the information and criteria that needs to be considered to determine how well the N removal values represent crop varieties grown within the Coalition.

Therefore, the N removal values in Geisseler (2016) are used in this analysis because they are the best available sources of data, but they should not be considered definitive, and they should be expected to change and improve over time. No conversions from A/Y to A/R or A-R were attempted for crops without a N removed coefficient.

**Table 4. N Removed (R) Conversion Factors**

Crop	# of Observations		CV (%)	N Removed Conversion Factor (lbs N/ lb yield)
	California	Total		
<b>Field Crops</b>				
Alfalfa - Hay	49	49	12.5	0.031150
Alfalfa – Silage	6	6	17.5	0.012000
Barley – Grain	4	61	14.6	0.016800
Barley – Straw	0	970	31.3	0.007700
Beans, dry - Blackeye	1	164	10.4	0.036500
Beans, dry - Garbanzo	2	108	11.3	0.033600
Beans, dry - Lima	2	75	5.4	0.036150
Corn – Grain	0	1775	20.8	0.012000
Corn – Silage	71	71	10.5	0.003780
Cotton	27	80	29.5	0.021850
Fescue, Tall - Hay	260	260	16.2	0.025400
Oat – Grain	0	134	9.6	0.018850
Oat – Straw	2	526	34.7	0.007400
Oat – Hay	49	49	18.2	0.010850
Orchard Grass - Hay	60	60	20	0.027250
Ryegrass, Perennial - Hay	60	60	16.8	0.027450
Safflower	12	149	20	0.028400
Sorghum – Grain	0	256	29.7	0.016500
Sorghum - Silage	260	260	21	0.003670
Sunflower	0	208	14.3	0.027050
Triticale - Grain	51	51	13	0.020200
Triticale - Straw	0	102	38.3	0.005750
Triticale - Silage	19	19	13.7	0.004515
Wheat, common - Grain	113	113	10.3	0.021500
Wheat - Straw	3	494	33	0.006900
Wheat - Silage	39	39	18.6	0.005250
Wheat, durum - Grain	41	41	3.7	0.021050

Crop	# of Observations		CV%	N Removed Conversion Factor (lbs N/ lb yield)
	California	Total		
<b>Vegetables</b>				
Asparagus	2	19	14	0.002925
Beans, green (snap beans)	1	122	25.7	0.002890
Broccoli	15	46	20.4	0.005600
Carrots	1	167	22.4	0.001645
Corn, sweet	0	50	13.1	0.003585
Cucumbers	1	10	17.4	0.001080
Garlic	1	12	19.5	0.007550
Lettuce, Iceberg	45	68	16.7	0.001315
Lettuce, Romaine	14	26	13.7	0.001810
Melons, Cantaloupe	1	31	15.5	0.002435
Melons, Honeydew	1	12	22.1	0.001475
Melons, Watermelons	1	6	23.9	0.000695
Onions	13	45	19.7	0.001970
Pepper, Bell	6	40	7.9	0.001655
Potatoes	5	64	13.6	0.003120
Pumpkin	1	13	10.1	0.003680
Squash	11	74	22.4	0.001835
Sweet potatoes	11	23	16.8	0.002370
Tomatoes, fresh market	1	34	16.5	0.001305
Tomatoes, processing	24	24	11.1	0.001365

Crop	# of Observations		CV (%)	N Removed Conversion Factor (lbs N/ lb yield)
	California	Total		
<b>Tree and Vine Crops</b>				
Almonds	31	31	4.1	0.068000
Apples	1	132	35.1	0.000540
Apricots	1	22	114	0.002780
Cherries	1	24	19.8	0.002210
Figs	1	19	18.1	0.001270
Grapefruit	26	27	7.8	0.001480
Grapes - Raisins	16	19	5.8	0.005050
Grapes - Table	16	19	5.8	0.001130
Grapes - Wine	8	38	13	0.001800
Lemons	21	22	10	0.001290
Nectarines	31	41	27.1	0.001820
Olives	6	29	22.8	0.003140
Oranges	26	82	10.9	0.001480
Peaches	5	25	20.7	0.001130
Pears	1	64	17.9	0.000645
Pistachios	11	11	3.5	0.028050
Plums	1	11	11.2	0.001415
Pomegranate	0	7	15	0.007600
Prunes	18	18	16.3	0.005600
Tangerines	1	2	29.2	0.001270
Walnuts	18	18	11.2	0.015950

Notes:

1. Conversion factors calculated from N concentrations expressed in lbs/ton at a moisture content common for the respective crop at harvest.
2. The calculated value for N removed is only accurate on a multi-year basis, but may not be accurate for a specific year.
3. For perennial crops, N accumulation in perennial tissue is not included in the value.
4. For most crops where marketable yield is reported and cull or trash is removed in a processing facility, the calculated amount of N removed underestimates the actual amount, the difference being the N in cull or trash.

## 4 DOCUMENTATION OF STATISTICAL PROCEDURES AND TOOLS

### Approach

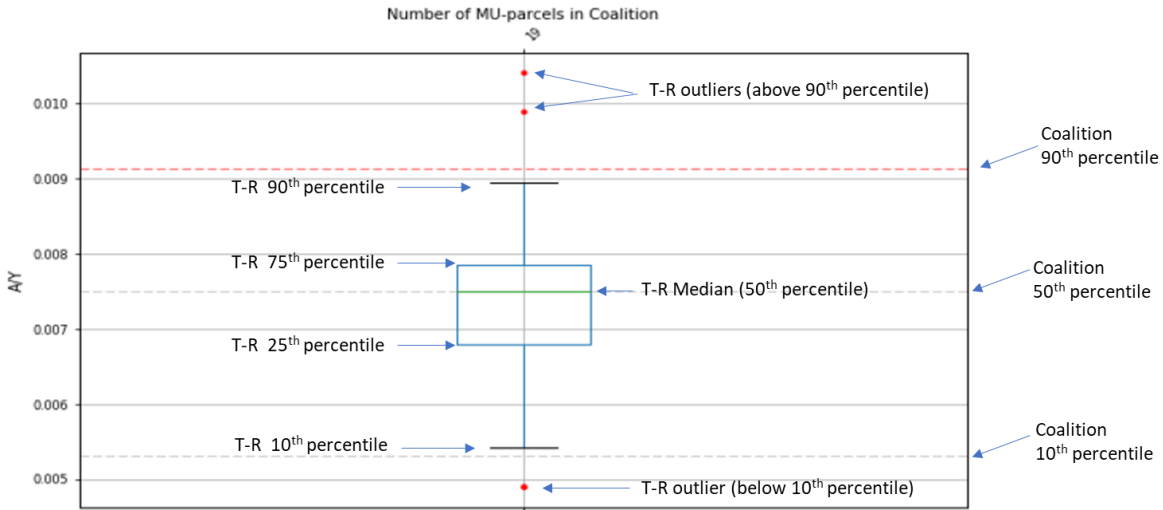
Statistical analysis was performed with Python, an open-source, high-level performing coding language. MU-parcels that were excluded as discussed in Section 2.2 were not analyzed. Since some MUs had a large number of parcels (up to 60) that were non-contiguous and spanned multiple townships, each parcel within a MU (MU-parcel) was counted as a data point and analyzed separately. Thus, in MUs with multiple parcels, that individual MU's A/Y value was duplicated across each associated parcel. The MU could have different outlier status for its associated parcels if the parcel centroids fell within different townships.

Summary statistics and outlier status for crops with large sample sizes were calculated for each T-R block and for the whole Coalition. For crops with small sample sizes, statistics were generated only for the whole Coalition, since individual T-R statistics were not meaningful.

### Summary Statistics

The summary statistics calculated were minimum and maximum A/Y, A/R, and A-R (where possible) and the 10<sup>th</sup>, 25<sup>th</sup>, 50<sup>th</sup>, 75<sup>th</sup>, and 90<sup>th</sup> percentiles for these parameters. The percentiles represent the value below which a given percentage of the observations fall. For example, the 90<sup>th</sup> percentile is the value below which 90% of the observations (MU-parcels) fall. If there is only one observation or all observations have the same value, the percentiles can't be calculated. The percentile calculation used linear interpolation between data points; thus, if only two different observations are in a township, both were considered outliers (less than 10<sup>th</sup> percentile; greater than 90<sup>th</sup> percentile). The percentiles are more accurate when more data is available.

The summary statistics are provided in Appendix A in tabular format and box and whisker plots for each crop. In the box and whisker plots, the boxes draw the 25<sup>th</sup>, 50<sup>th</sup>, and 75<sup>th</sup> percentiles for A/Y for the given T-R block or Coalition, and whiskers show the range of data occurring no more than 1.5 times the length of the box away from the box (Figure 3). Outliers above the 90<sup>th</sup> percentile and below the 10<sup>th</sup> percentile are shown as red dots above and below the boxplot, respectively. The Coalition-wide 90<sup>th</sup> percentile value is shown as a red horizontal dashed line across the boxplot chart. The outliers in an individual township may not be an outlier at the Coalition level. Tabular summary statistics are provided below the boxplots for A/Y, A/R, and A-R for each T-R block (where applicable) and for the whole Coalition. For crops with only 1-2 MUs or where all A/Y values were identical, boxplots could not be generated; thus, only tabular Coalition-wide summary statistics were provided (see Other Crops section at the end of Appendix A).



**Figure 3. Example of Box and Whisker Plots**

### Outlier Evaluation

In order to evaluate whether an outlier is due to high N application or low yield, scatterplots of A vs Y are also provided for each crop in Appendix A. Each dot in the scatter plot is a MU-parcel and outliers (A/Y greater than 90%) are highlighted in red. Fertilizer recommendations from University of California Cooperative Extension (UCCE), where available, are shown as blue horizontal dashed lines on the scatterplots. These recommendations vary based on crop age, specific crop type, yield goal, and other site-specific information and thus may not be applicable to specific fields or to the Coalition region. More detailed information on the fertilizer values is provided in Appendix B. Values were typically reported as a range, and only the maximum value in the range is shown on the scatterplots. Some of the values are not recommendations but estimates of the amount of fertilizer used in a typical operation (Appendix B).

### GIS Deliverable

An ESRI file geodatabase and tabular spreadsheet summarizing the A/Y, A/R, and A-R summary statistics by crop in each township, as required by Report Component 19, is provided in Appendix D.

### Soil Type and Irrigation Method Analysis

The WDRs further require “an assessment of NMP Summary Report information for, at a minimum, comparisons of farms with the same crops, similar soil conditions, and similar practices (e.g. irrigation management).” Soil type and irrigation method were selected as the parameters to further evaluate outlier status as described below. This analysis was performed at a Coalition-wide level for each crop since several townships had only a few MUs, limiting the reliability of a township level analysis.

## **4.1 SOIL TYPE EVALUATION**

Soil type was evaluated based on the predominant USDA-NRCS soil drainage class for the largest map unit within each MU-parcel. Soil drainage class refers to the frequency and duration of wet periods under conditions similar to those under which the soil developed. Anthropogenic alteration of the water regime, either through drainage or irrigation, is not a consideration unless the alterations have significantly changed the morphology of the soil. The drainage classes were aggregated into the following four major classes:



1. Well Drained
  - Excessively drained
  - Somewhat excessively drained
  - Well drained
2. Moderately well drained
3. Somewhat poorly drained
4. Poorly drained
  - Poorly drained
  - Very poorly drained

Soil drainage class is often reflective of saturated hydraulic conductivity ( $K_{sat}$ ) with poorly drained soils often exhibiting low  $K_{sat}$  values; however, this is not always the case, as sandy high  $K_{sat}$  soils can have poor drainage in areas with high water tables. One advantage of drainage class compared to  $K_{sat}$  is it estimates overall water movement throughout the soil profile which can be influenced by soil restrictive layers that may not be reflected in a soil's  $K_{sat}$  value.

Soil data was obtained from USDA Soil Survey Geographic Database (SSURGO) (<https://websoilsurvey.nrcs.usda.gov/>). In the SSURGO database, each soil map unit polygon is comprised of one or more unmapped components identified in related tables. Each component makes up an estimated percentage of the map unit. The component making up the highest estimated percentage was selected to represent the drainage class assigned to each map unit polygon. In cases where multiple maximum components existed, the poorest drainage class out of the maximum components was selected.

The influence of soil drainage class on outlier status (outlier or non-outlier) for each crop was assessed using a Chi-square test of Independence. This statistical analysis evaluates the hypothesis that the outlier status for a given crop and soil drainage class are independent of one another. To test this, a matrix counting the number of outliers and non-outliers associated with each drainage class for each crop was prepared. Differences in the frequency of outliers among the soil types for each crop were evaluated with the Chi-square test which was performed using R software for statistical computing (<https://www.R-project.org/>). The p-value determined from the Chi-square statistic was evaluated against a significance level of 0.05. If the p-value was less than the significance level (0.05), there was a relationship between outliers and drainage class. This analysis was not performed on crops with limited representation in the Coalition because the sample size was not large enough to obtain a valid result. Even for crops with better representation, the total number of observations within each drainage class could vary greatly (e.g. well drained soils predominate across the valley floor), reducing the reliability of the test.

## 4.2 IRRIGATION TYPE EVALUATION

The Coalition also evaluated if irrigation practice could influence the frequency of outliers for each crop. Irrigation practice data were obtained from growers' Farm Evaluation Surveys, which are annual submissions providing information about irrigation practices, N management practices, active and abandoned wells, pesticide practices, and sediment/erosion control practices. The primary irrigation practice for each parcel was determined from the Farm Evaluation Survey and associated with the NMP Summary Report data based on APN. When an APN was associated with multiple MUs, crop type and

acreage were used to link associated records. Several NMP Summary Report MUs (15%) did not have a corresponding record in the irrigation dataset and thus were excluded from the irrigation practice analysis. Irrigation practices were grouped into two broad classes based on water use efficiency:

1. Flood irrigation
  - Flood
  - Furrow
  - Border strip
2. Micro-irrigation
  - Drip (including subsurface drip)
  - Micro-sprinkler
  - Sprinkler

The flood irrigation class represents the less efficient group of practices compared to the micro-irrigation class which includes more efficient practices. This grouping was done as some of the specific irrigation practices had low sample sizes for a given crop which would lower the reliability of the analysis. The influence of irrigation practice on outlier status (outlier or non-outlier) for each crop was assessed using the same Chi-square test method described above to evaluate drainage class. If the p-value was less than the significance level (0.05), there was a relationship between outliers and irrigation practice. This analysis was not performed on crops with limited representation in the Coalition because the sample size was not large enough to obtain a valid result.

## 5 RESULTS

The summary statistics grouped by crop are provided in Appendix A. Crops with limited representation do not have a boxplot and are shown in the Other Crops category. The crops for some MUs were not specified on the member's NMP Summary Report while for other MUs there was a mix of crops (misc. fruit trees, misc. vegetables). Several crops did not have published N removed coefficients to allow calculation of R. Overall, there were several townships with small numbers of MUs where outlier determination was less reliable. In townships with only two values, these two points marked the highest and lowest values, and thus both were considered outliers (less than 10<sup>th</sup> percentile and greater than 90<sup>th</sup> percentile). The A/Y values for vegetable seed crops were several orders of magnitude higher than their non-seed crop counterparts (e.g. squash and melon) due to how seed yield is measured; thus, this information is important for members to note on their reports. For the crops with large sample sizes, there generally appeared to be a wide range in A/Y values, some of which were orders of magnitude apart. Reporting errors were likely responsible for some of the wide ranges observed in A/Y values.

### 5.1 SOIL TYPE EVALUATION RESULTS

Overall, there was little evidence that soil drainage class influenced the frequency of A/Y outliers for Coalition members (Table 5). Each of the four soil drainage classes had approximately 19% outliers across the entire Coalition. When grouped by crop, only four of the seventeen crops analyzed (corn, pear, peppers, and safflower) had significant differences. For pear, peppers, and safflower, there were few observations (some drainage classes had zero observations which had to be removed to avoid divide by zero errors); thus, the reliability of the test was relatively low. Corn appeared to have fewer outliers in the well drained class compared to the other soil drainage classes; however, the differences were not large and the significant results could have occurred by chance. Several crops could not be analyzed individually because of the small sample size. This was compounded by the predominance of well drained soils across the valley floor, which reduced the number of observations collected in other

drainage classes. Based on these results, there is no evidence of an effect of soil drainage class on A/Y outliers; however, the limited sample size within drainage classes for most crops limited the reliability of the analysis.

**Table 5. Evaluation of the Frequency of A/Y Outliers by Soil Drainage Class.**

Crop	NRCS Drainage Class	# of MU-parcels	Outliers	Non-Outliers	Proportion of Outliers	P-value
ALL CROPS	Poor	313	59	254	19%	0.94
	Somewhat Poor	589	111	478	19%	
	Moderately Well	680	126	554	19%	
	Well	2304	448	1856	19%	
ALFALFA	Poor	23	3	20	13%	0.9656
	Somewhat Poor	34	3	31	9%	
	Moderately Well	108	11	97	10%	
	Well	117	12	105	10%	
ALMONDS	Poor	28	6	22	21%	0.9584
	Somewhat Poor	50	10	40	20%	
	Moderately Well	63	14	49	22%	
	Well	574	112	462	20%	
BEANS - DRY	Poor	6	2	4	33%	0.7304
	Somewhat Poor	9	2	7	22%	
	Moderately Well	19	4	15	21%	
	Well	28	4	24	14%	
CORN	Poor	17	3	14	18%	0.04948
	Somewhat Poor	29	6	23	21%	
	Moderately Well	23	6	17	26%	
	Well	68	4	64	6%	
CUCUMBER	Poor	6	2	4	33%	0.2507
	Somewhat Poor	2	2	0	100%	
	Moderately Well	6	2	4	33%	
	Well	5	1	4	20%	
GRAPE	Poor	56	10	46	18%	0.4085
	Somewhat Poor	33	3	30	9%	
	Moderately Well	1	0	1	0%	
	Well	6	2	4	33%	
OLIVE	Poor	3	2	1	67%	0.2629
	Somewhat Poor	7	3	4	43%	
	Moderately Well	10	2	8	20%	
	Well	52	12	40	23%	

Crop	NRCS Drainage Class	# of MU-parcels	Outliers	Non-Outliers	Proportion of Outliers	P-value
PEACH	Poor	0	N/A	N/A	N/A	0.8647
	Somewhat Poor	1	0	1	0%	
	Moderately Well	18	2	16	11%	
	Well	41	6	35	15%	
PEAR	Poor	8	2	6	25%	0.02137
	Somewhat Poor	16	2	14	13%	
	Moderately Well	0	N/A	N/A	N/A	
	Well	2	2	0	100%	
PEPPERS	Poor	0	N/A	N/A	N/A	0.06375
	Somewhat Poor	2	2	0	100%	
	Moderately Well	4	1	3	25%	
	Well	11	2	9	18%	
PRUNES	Poor	8	2	6	25%	0.5167
	Somewhat Poor	17	1	16	6%	
	Moderately Well	34	7	27	21%	
	Well	112	23	89	21%	
SAFFLOWER	Poor	20	3	17	15%	0.04558
	Somewhat Poor	17	3	14	18%	
	Moderately Well	2	2	0	100%	
	Well	12	3	9	25%	
SUNFLOWER	Poor	24	2	22	8%	0.5154
	Somewhat Poor	46	9	37	20%	
	Moderately Well	46	8	38	17%	
	Well	132	28	104	21%	
TOMATO	Poor	31	5	26	16%	0.2954
	Somewhat Poor	81	9	72	11%	
	Moderately Well	50	10	40	20%	
	Well	256	52	204	20%	
VINE SEED	Poor	3	1	2	33%	0.689
	Somewhat Poor	15	3	12	20%	
	Moderately Well	10	1	9	10%	
	Well	14	4	10	29%	

Notes:

N/A – drainage classes with no observations were removed from chi-square test to prevent divide by zero error.

Crop	NRCS Drainage Class	# of MU-parcels	Outliers	Non-Outliers	Proportion of Outliers	P-value
WALNUTS	Poor	41	8	33	20%	0.9998
	Somewhat Poor	149	30	119	20%	
	Moderately Well	190	38	152	20%	
	Well	665	133	532	20%	
WHEAT	Poor	19	1	18	5%	0.2789
	Somewhat Poor	30	3	27	10%	
	Moderately Well	35	8	27	23%	
	Well	96	17	79	18%	

## 5.2 IRRIGATION PRACTICE EVALUATION RESULTS

The Coalition also evaluated whether primary irrigation practice identified on member’s Farm Evaluation Surveys influenced the frequency of A/Y outliers. Overall, both irrigation classes (drip/micro-sprinkler/sprinkler and flood/furrow/border strip) had little difference in the proportion of outliers (Table 6). When grouped by crop, none of the crops analyzed had significant differences between the two irrigation classes. Several of the individual crops had small sample sizes which lowered the reliability of the test result and prevented analysis on some. Based on these results, there is no evidence of an effect of irrigation class on A/Y outliers; however, the small sample sizes for most crops limited the reliability of the analysis.

**Table 6. Evaluation of the Frequency of A/Y Outliers by Irrigation Class.**

Crop	Irrigation Class	# MU-parcels	Outliers	Non-Outliers	Proportion of Outliers	P-value
ALL CROPS	Drip/Micro-Sprinkler/Sprinkler	2213	424	1789	19%	0.3609
	Flood/Furrow/Border Strip	971	172	799	18%	
ALFALFA	Drip/Micro-Sprinkler/Sprinkler	41	4	37	10%	1
	Flood/Furrow/Border Strip	206	21	185	10%	
ALMONDS	Drip/Micro-Sprinkler/Sprinkler	639	127	512	20%	0.6022
	Flood/Furrow/Border Strip	17	2	15	12%	
BEANS - DRY	Drip/Micro-Sprinkler/Sprinkler	17	4	13	24%	0.7565
	Flood/Furrow/Border Strip	21	3	18	14%	
CORN	Drip/Micro-Sprinkler/Sprinkler	31	6	25	19%	1
	Flood/Furrow/Border Strip	74	15	59	20%	
CUCUMBER	Drip/Micro-Sprinkler/Sprinkler	7	2	5	29%	1
	Flood/Furrow/Border Strip	12	4	8	33%	

Crop	Irrigation Practice	# MU-parcels	Outliers	Non-Outliers	Proportion of Outliers	P-value
GRAPE	Drip/Micro-Sprinkler/Sprinkler	85	6	79	7%	1
	Flood/Furrow/Border Strip	10	1	9	10%	
OLIVE	Drip/Micro-Sprinkler/Sprinkler	62	14	48	23%	0.7258
	Flood/Furrow/Border Strip	9	1	8	11%	
PEACH	Drip/Micro-Sprinkler/Sprinkler	23	4	19	17%	0.9141
	Flood/Furrow/Border Strip	7	2	5	29%	
PEAR	Drip/Micro-Sprinkler/Sprinkler	19	7	12	37%	1
	Flood/Furrow/Border Strip	4	2	2	50%	
PEPPERS	Drip/Micro-Sprinkler/Sprinkler	5	2	3	40%	1
	Flood/Furrow/Border Strip	12	4	8	33%	
PRUNES	Drip/Micro-Sprinkler/Sprinkler	80	15	65	19%	0.05974
	Flood/Furrow/Border Strip	33	1	32	3%	
SAFFLOWER	Drip/Micro-Sprinkler/Sprinkler	12	2	10	17%	1
	Flood/Furrow/Border Strip	24	4	20	17%	
SUNFLOWER	Drip/Micro-Sprinkler/Sprinkler	117	22	95	19%	1
	Flood/Furrow/Border Strip	111	21	90	19%	
TOMATO	Drip/Micro-Sprinkler/Sprinkler	144	27	117	19%	1
	Flood/Furrow/Border Strip	136	26	110	19%	
VINE SEED	Drip/Micro-Sprinkler/Sprinkler	5	2	3	40%	0.9726
	Flood/Furrow/Border Strip	12	3	9	25%	
WALNUTS	Drip/Micro-Sprinkler/Sprinkler	810	162	648	20%	0.9923
	Flood/Furrow/Border Strip	97	20	77	21%	
WHEAT	Drip/Micro-Sprinkler/Sprinkler	36	2	34	6%	0.1017
	Flood/Furrow/Border Strip	112	21	91	19%	

## 6 CONCLUSIONS

Analysis of the NMP Summary Report statistics identified the following factors which limit the ability to interpret outlier status:

1. Several member NMP Summary Reports (approximately 15%) have not been received yet.
2. Several errors in reported data were identified during QA/QC. While the Coalition tried to identify and fix all of these errors, some values are likely still incorrect.
3. The highest A/Y value in a township is always considered an outlier regardless of how many data points there are or how different they are from each other. Many T-R blocks have only a few MUs, and thus, outliers in these T-Rs may not be an outlier when compared to the entire

Coalition. MUs within multiple townships may be an outlier within one township but not in the other.

4. The applicability of the N removed coefficients to crop varieties grown in the Coalition has not been verified and may need to be modified as more data becomes available.
5. The evaluation of soil and irrigation type effect on outlier status is limited for several crops by the small sample size. This limited the ability to run the analysis at the township level. Overall, no significant differences were identified at the Coalition level for drainage class or irrigation type.

Based on these factors, the Coalition-wide summary statistics appear to be more useful than the T-R statistics in evaluating outliers; however, reporting errors were likely responsible for some of the wide ranges observed in A/Y values. The reporting errors for A/Y could likely be reduced in future years by having subwatershed staff complete the A/Y calculation instead of members.

## **7 GROWER FEEDBACK AND OUTREACH**

Grower outreach will be conducted in fall/winter 2017. Outreach activities will include individualized reports sent to each grower member in the Coalition who submitted N application and yield data. The reports will include a table showing township averages for N applied, A/Y, and A/R for each of the grower's MU-parcels. An example of an individual grower report is provided in Appendix C.

## **8 REFERENCES**

Geisseler, D. 2016. Nitrogen concentrations in harvested plant parts - A literature overview.  
[https://apps1.cdfa.ca.gov/FertilizerResearch/docs/Geisseler\\_Report\\_2016\\_12\\_02.pdf](https://apps1.cdfa.ca.gov/FertilizerResearch/docs/Geisseler_Report_2016_12_02.pdf)



## **APPENDICES**

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**Appendix A: Summary Statistics by Crop for T-R Blocks and Coalition**

**Appendix B: Fertilizer Recommendations**

**Appendix C: Example Member NMP Summary Report**

**Appendix D: Tabular GIS Database Spreadsheet**

## **APPENDIX A**

### **SUMMARY STATISTICS BY CROP FOR T-R BLOCKS AND COALITION**

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I.	Alfalfa .....	1
II.	Almonds .....	8
III.	Apples .....	16
IV.	Asparagus.....	18
V.	Beans – Dry .....	20
VI.	Corn – Fodder/Silage .....	25
VII.	Corn – Grain .....	28
VIII.	Cucumber.....	33
IX.	Garlic .....	35
X.	Grape .....	37
XI.	Hay/Forage .....	40
XII.	Kiwi.....	42
XIII.	Melon .....	44
XIV.	Milo/Sorghum .....	46
XV.	Misc. Fruit Trees .....	48
XVI.	Misc. Vegetables .....	50
XVII.	Oats .....	52
XVIII.	Olive .....	54
XIX.	Pasture .....	58
XX.	Peach .....	60
XXI.	Pear .....	63
XXII.	Peppers .....	65
XXIII.	Persimmon .....	68
XXIV.	Pistachio .....	70
XXV.	Plum/Pluot .....	72
XXVI.	Prunes .....	74
XXVII.	Ryegrass .....	79
XXVIII.	Safflower .....	81
XXIX.	Squash .....	86
XXX.	Squash Seed .....	88
XXXI.	Sudan Grass .....	90
XXXII.	Sunflower .....	92
XXXIII.	Tomato - Fresh .....	99
XXXIV.	Tomato - Processing .....	101
XXXV.	Triticale .....	108
XXXVI.	Vine Seed .....	110
XXXVII.	Walnuts .....	113
XXXVIII.	Watermelon Seed .....	122
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## **APPENDIX B**

### **FERTILIZER RECOMMENDATIONS**

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## **APPENDIX C**

### **EXAMPLE MEMBER NMP SUMMARY REPORT**

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## **APPENDIX D**

### **TABULAR GIS DATABASE SPREADSHEET**

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(ESRI file geodatabase provided electronically)

## **APPENDIX A**

### **SUMMARY STATISTICS BY CROP FOR T-R BLOCKS AND COALITION**

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XXXVII.	Walnuts .....	113
XXXVIII.	Watermelon Seed.....	122
XXXIX.	Wheat .....	124
XL.	Other Crops .....	129

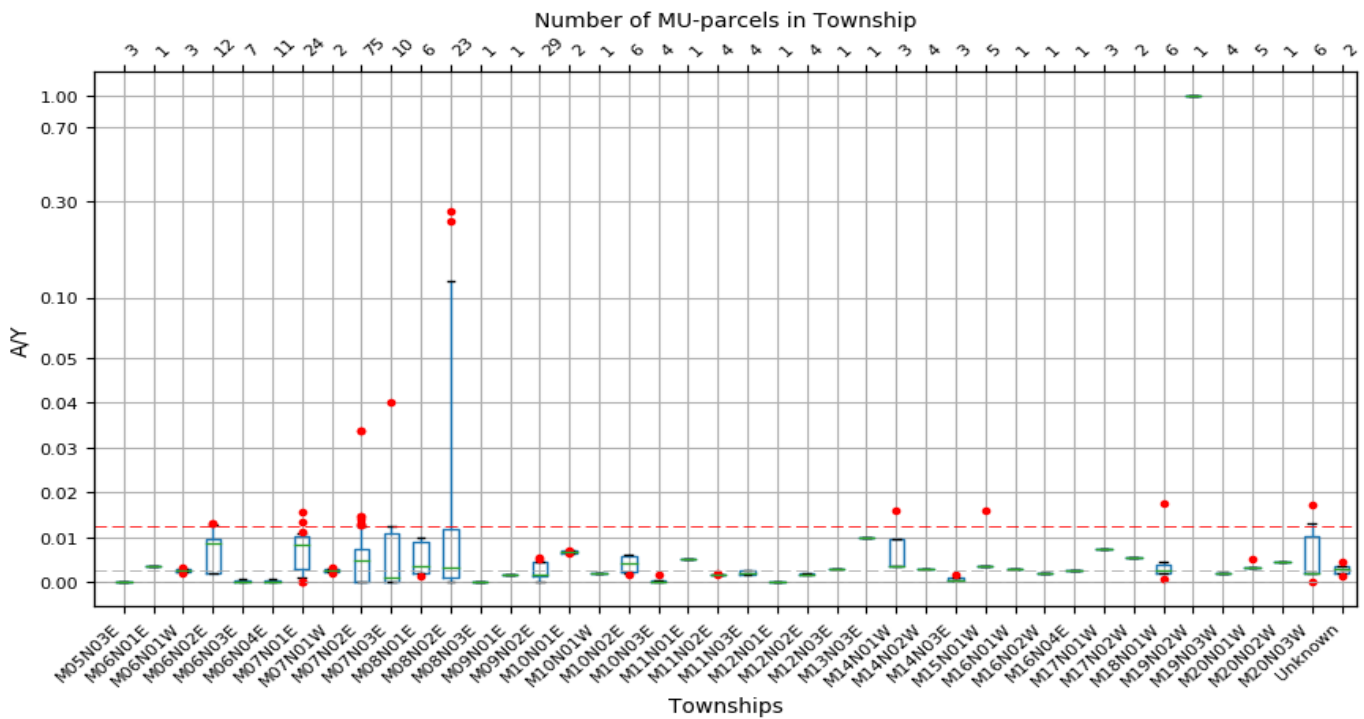


# I. ALFALFA

**Figure I-1. Box and Whisker plots of A/Y for ALFALFA management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.

**Grouped Boxplots by Township for ALFALFA**



**Table I-1. A/Y Summary Statistics for ALFALFA management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N03E	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
06N01E	1	0.0036	0.0036						
06N01W	3	0.0018	0.0031	0.002	0.0023	0.0027	0.0029	0.003	2
06N02E	12	0.0021	0.0131	0.0021	0.0021	0.0085	0.0096	0.0131	2
06N03E	7	0.0	0.0007	0.0	0.0	0.0	0.0004	0.0007	0
06N04E	11	0.0	0.0006	0.0	0.0	0.0	0.0004	0.0006	0
07N01E	24	0.0	0.0155	0.0003	0.0029	0.0082	0.0102	0.0111	6
07N01W	2	0.002	0.0032	0.0021	0.0023	0.0026	0.0029	0.0031	2
07N02E	75	0.0	0.0337	0.0	0.0	0.0049	0.0075	0.0127	8
07N03E	10	0.0	0.04	0.0	0.0	0.001	0.0109	0.0152	1
08N01E	6	0.0012	0.01	0.0016	0.002	0.0036	0.0088	0.01	1
08N02E	23	0.0	0.27	0.0	0.001	0.0032	0.0118	0.12	2
08N03E	1	0.0	0.0						
09N01E	1	0.0015	0.0015						
09N02E	29	0.0	0.0053	0.0	0.0012	0.0015	0.0044	0.0044	2
10N01E	2	0.0063	0.0071	0.0064	0.0065	0.0067	0.0069	0.007	2
10N01W	1	0.0019	0.0019						
10N02E	6	0.0016	0.006	0.0017	0.0022	0.0041	0.0057	0.006	1
10N03E	4	0.0	0.0017	0.0	0.0	0.0	0.0004	0.0012	1
11N01E	1	0.0052	0.0052						
11N02E	4	0.0016	0.0019	0.0016	0.0017	0.0017	0.0017	0.0018	2
11N03E	4	0.0017	0.0025	0.0017	0.0017	0.0021	0.0025	0.0025	0
12N01E	1	0.0	0.0						
12N02E	4	0.0015	0.002	0.0015	0.0015	0.0018	0.002	0.002	0
12N03E	1	0.003	0.003						
13N03E	1	0.01	0.01						
14N01W	3	0.0034	0.016	0.0034	0.0034	0.0034	0.0097	0.0135	1
14N02W	4	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0
14N03E	3	0.0005	0.0017	0.0005	0.0005	0.0005	0.0011	0.0015	1
15N01W	5	0.0034	0.016	0.0034	0.0034	0.0034	0.0034	0.011	1
16N01W	1	0.0028	0.0028						
16N02W	1	0.002	0.002						
16N04E	1	0.0025	0.0025						
17N01W	3	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0
17N02W	2	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053	0

<b>T-R</b>	<b>No. MU-parcels</b>	<b>Min</b>	<b>Max</b>	<b>10%</b>	<b>25%</b>	<b>50%</b>	<b>75%</b>	<b>90%</b>	<b>No. Outliers</b>
18N01W	6	0.0007	0.0174	0.0013	0.002	0.0025	0.004	0.011	2
19N02W	1	1.0	1.0						
19N03W	4	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0
20N01W	5	0.0031	0.0052	0.0031	0.0031	0.0031	0.0031	0.0044	1
20N02W	1	0.0045	0.0045						
20N03W	6	0.0	0.0173	0.001	0.002	0.002	0.0103	0.0152	2
Unknown	2	0.0013	0.0044	0.0016	0.0021	0.0028	0.0036	0.0041	2

**Table I-2. A/R Summary Statistics for ALFALFA management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N03E	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
06N01E	1	0.1141	0.1141						
06N01W	3	0.0584	0.0988	0.0638	0.072	0.0856	0.0922	0.0962	2
06N02E	12	0.0669	0.4218	0.0669	0.0678	0.273	0.3083	0.4206	2
06N03E	7	0.0	0.0209	0.0	0.0	0.0	0.0104	0.0209	0
06N04E	11	0.0	0.0183	0.0	0.0	0.0	0.0144	0.0183	0
07N01E	24	0.0	0.4975	0.0109	0.0931	0.263	0.3283	0.3547	6
07N01W	2	0.0642	0.1027	0.068	0.0738	0.0834	0.0931	0.0988	2
07N02E	75	0.0	1.0815	0.0	0.0	0.1578	0.2407	0.4069	8
07N03E	10	0.0	1.2841	0.0	0.0	0.0334	0.3491	0.489	1
08N01E	6	0.0379	0.3225	0.0518	0.0657	0.1184	0.2847	0.3225	1
08N02E	23	0.0	8.6677	0.0	0.0349	0.103	0.3784	3.8523	2
08N03E	1	0.0	0.0						
09N01E	1	0.0482	0.0482						
09N02E	29	0.0	0.1712	0.0	0.0397	0.0468	0.1413	0.1413	2
10N01E	2	0.2006	0.2279	0.2033	0.2074	0.2142	0.2211	0.2252	2
10N01W	1	0.0621	0.0621						
10N02E	6	0.0503	0.1912	0.0547	0.0724	0.1312	0.1809	0.1912	1
10N03E	4	0.0	0.0542	0.0	0.0	0.0	0.0136	0.0379	1
11N01E	1	0.1653	0.1653						
11N02E	4	0.051	0.0621	0.052	0.0534	0.0542	0.0562	0.0597	2
11N03E	4	0.0542	0.08	0.0542	0.0542	0.0671	0.08	0.08	0
12N02E	4	0.048	0.064	0.048	0.048	0.056	0.064	0.064	0
12N03E	1	0.096	0.096						
13N03E	1	0.321	0.321						
14N01W	3	0.1108	1026.9663	0.1108	0.1108	0.1108	513.5386	821.5952	1
14N02W	4	0.0963	0.0963	0.0963	0.0963	0.0963	0.0963	0.0963	0
14N03E	3	0.016	0.055	0.016	0.016	0.016	0.0355	0.0472	1
15N01W	5	0.1108	1026.9663	0.1108	0.1108	0.1108	0.1108	616.2241	1
16N01W	1	0.0892	0.0892						
16N02W	1	0.0642	0.0642						
16N04E	1	0.08	0.08						
17N01W	3	0.2408	0.2408	0.2408	0.2408	0.2408	0.2408	0.2408	0
17N02W	2	0.1713	0.1713	0.1713	0.1713	0.1713	0.1713	0.1713	0
18N01W	5	0.0235	0.1445	0.0382	0.0602	0.0793	0.0793	0.1184	2

<b>T-R</b>	<b>No. MU-parcels</b>	<b>Min</b>	<b>Max</b>	<b>10%</b>	<b>25%</b>	<b>50%</b>	<b>75%</b>	<b>90%</b>	<b>No. Outliers</b>
19N02W	1	0.1776	0.1776						
19N03W	4	0.0562	0.0562	0.0562	0.0562	0.0562	0.0562	0.0562	0
20N01W	5	0.0979	0.1658	0.0979	0.0979	0.0979	0.0979	0.1386	1
20N02W	1	0.1445	0.1445						
20N03W	5	0.0002	0.4198	0.0258	0.0642	0.0642	0.0642	0.2776	2
Unknown	2	0.04	0.1413	0.0501	0.0653	0.0907	0.116	0.1312	2

**Table I-3. A-R Summary Statistics for ALFALFA management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N03E	3	-436.1	-436.1	-436.1	-436.1	-436.1	-436.1	-436.1	0
06N01E	1	-248.35	-248.35						
06N01W	3	-341.8	-291.96	-337.97	-332.22	-322.65	-307.3	-298.1	2
06N02E	12	-313.92	-174.22	-313.92	-309.25	-255.86	-219.07	-174.22	0
06N03E	7	-375.38	0.0	-375.38	-187.69	0.0	0.0	0.0	0
06N04E	11	-429.19	0.0	-429.19	-356.42	0.0	0.0	0.0	0
07N01E	24	-623.0	-133.61	-455.58	-385.28	-325.94	-270.81	-264.71	6
07N01W	2	-466.4	-279.5	-447.71	-419.67	-372.95	-326.23	-298.19	2
07N02E	75	-604.43	-17.84	-409.7	-342.65	-332.81	-311.5	-193.13	16
07N03E	10	-436.1	44.25	-436.1	-404.49	-244.03	-19.95	4.42	1
08N01E	6	-599.39	-284.38	-493.32	-370.48	-320.15	-293.32	-284.38	1
08N02E	23	-622.13	40.72	-605.68	-505.88	-344.36	-310.53	23.39	6
08N03E	1	-436.1	-436.1						
09N01E	1	-415.1	-415.1						
09N02E	29	-508.55	0.0	-450.01	-427.56	-387.25	-217.07	0.0	3
10N01E	2	-398.4	-338.73	-392.43	-383.48	-368.57	-353.65	-344.7	2
10N01W	1	-362.36	-362.36						
10N02E	6	-396.41	-221.7	-365.26	-333.53	-310.49	-238.57	-221.7	1
10N03E	4	-504.63	0.0	-494.66	-479.71	-390.83	-232.69	-93.08	2
11N01E	1	-212.04	-212.04						
11N02E	4	-528.2	-362.36	-511.16	-485.6	-471.4	-444.14	-395.07	2
11N03E	4	-471.4	-229.2	-471.4	-471.4	-350.3	-229.2	-229.2	0
12N01E	1	0.0	0.0						
12N02E	4	-539.41	-398.18	-539.41	-539.41	-468.8	-398.18	-398.18	0
12N03E	1	-197.1	-197.1						
13N03E	1	-126.9	-126.9						
14N01W	3	-361.0	31.97	-361.0	-361.0	-361.0	-164.52	-46.62	1
14N02W	4	-282.0	-282.0	-282.0	-282.0	-282.0	-282.0	-282.0	0
14N03E	3	-618.22	-285.8	-618.22	-618.22	-618.22	-452.01	-352.28	1
15N01W	5	-361.0	31.97	-361.0	-361.0	-361.0	-361.0	-125.22	1
16N01W	1	-511.0	-511.0						
16N02W	1	-437.0	-437.0						
16N04E	1	-286.5	-286.5						
17N01W	3	-473.0	-473.0	-473.0	-473.0	-473.0	-473.0	-473.0	0
17N02W	2	-310.0	-310.0	-310.0	-310.0	-310.0	-310.0	-310.0	0

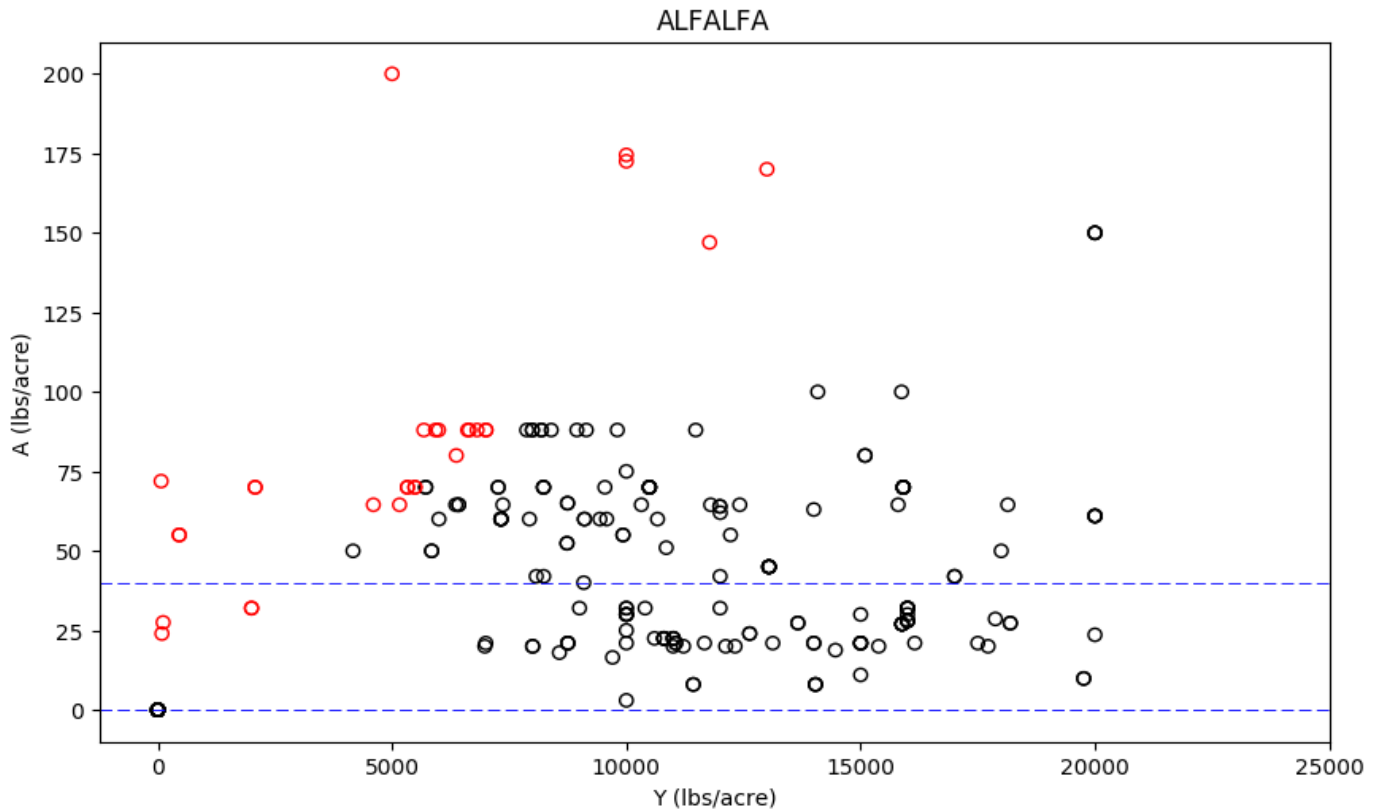
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
18N01W	5	-488.0	-373.0	-488.0	-488.0	-468.0	-456.0	-406.2	1
19N02W	1	-333.07	-333.07						
19N03W	4	-470.0	-470.0	-470.0	-470.0	-470.0	-470.0	-470.0	0
20N01W	5	-562.0	-312.0	-562.0	-562.0	-562.0	-562.0	-412.0	1
20N02W	1	-326.0	-326.0						
20N03W	5	-40246.6	-235.0	-24334.36	-466.0	-466.0	-466.0	-327.4	2
Unknown	2	-478.4	-243.18	-454.88	-419.6	-360.79	-301.99	-266.7	2

**Table I-4. Summary Statistics for ALFALFA management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	285	0.0	1.0	0.0	0.0006	0.0025	0.0067	0.0124	29
A/R	285	0.0	1026.9663	0.0	0.0183	0.08	0.2136	0.3826	29
A-R	285	-40246.6	44.25	-500.13	-429.19	-333.1	-270.81	0.0	36

**Figure I-2. Scatter plot of A vs. Y for ALFALFA with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



NOTE: 1 records above Yield value of 25000 lbs/acre not shown to avoid skewing of scatter plot

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## II. ALMONDS

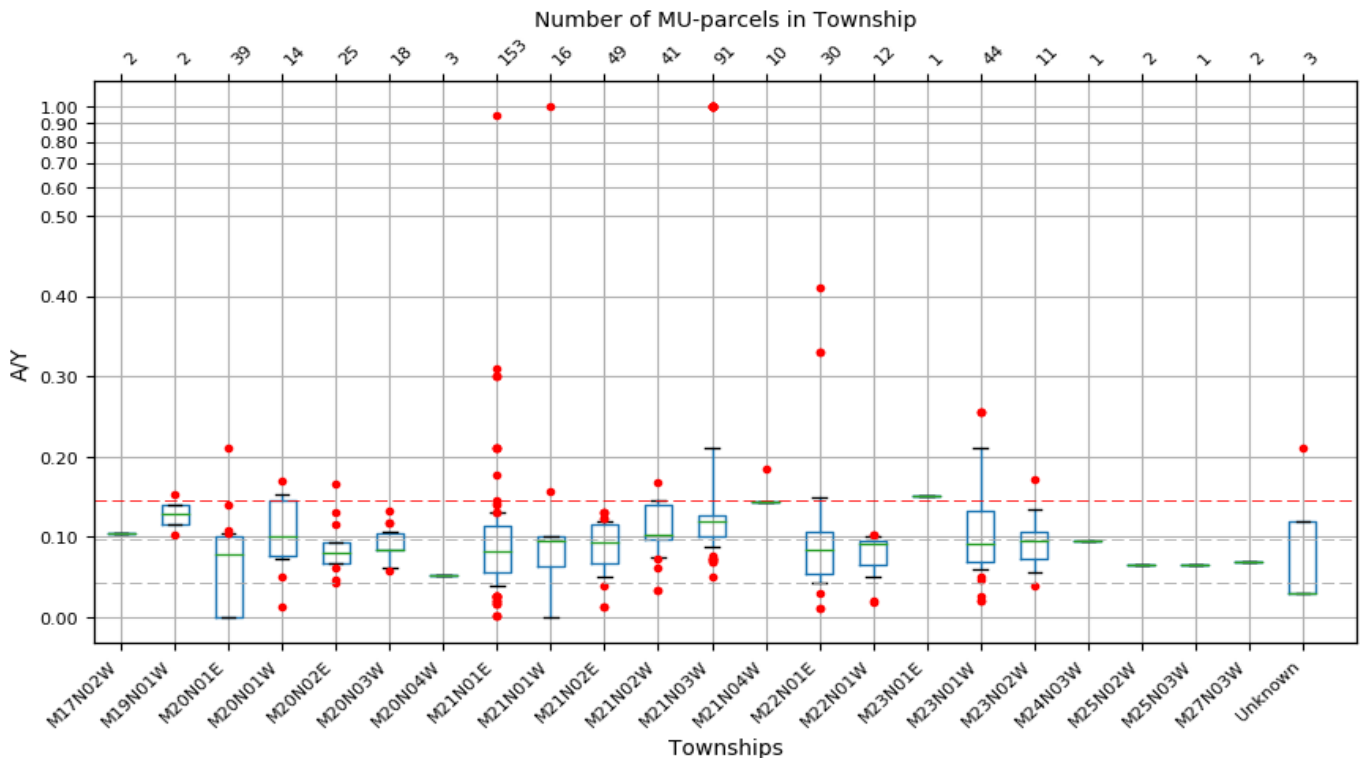
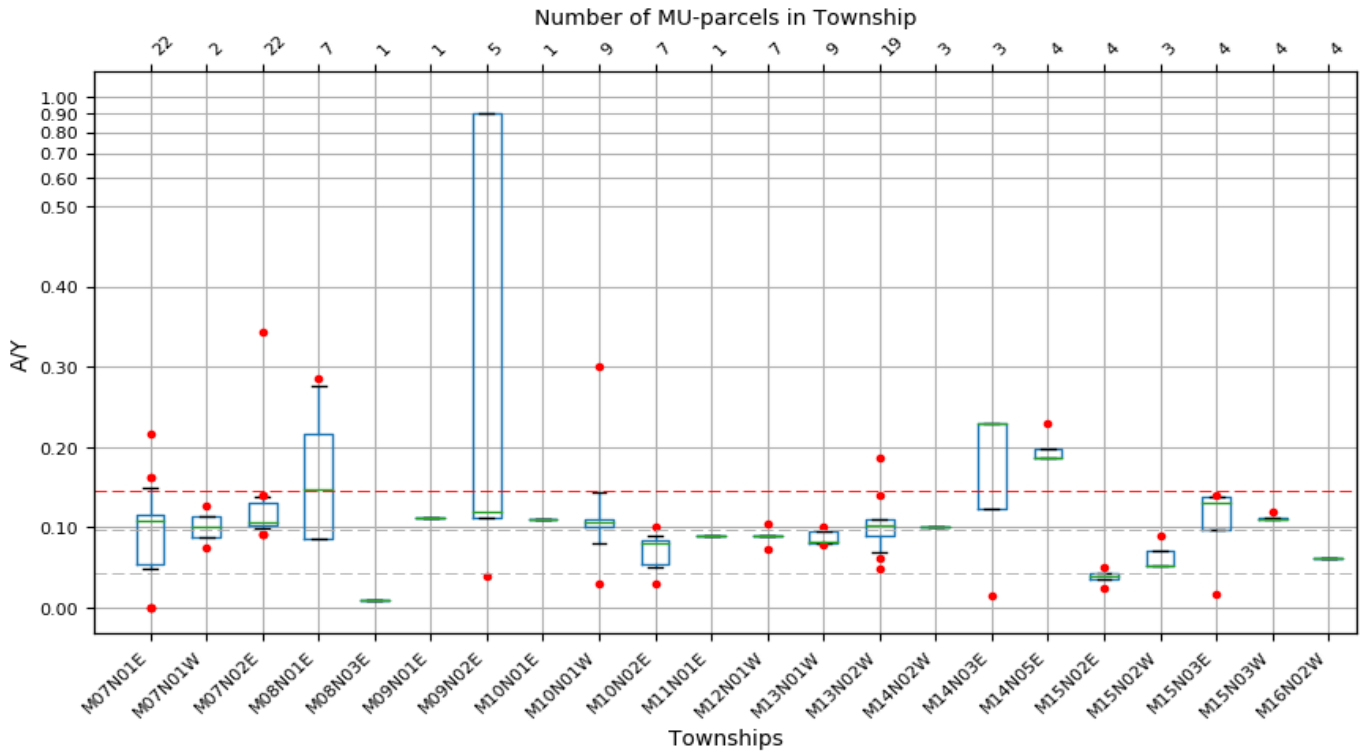
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**Figure II-1. Box and Whisker plots of A/Y for ALMONDS management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.

### Grouped Boxplots by Township for ALMONDS



**Table II-1. A/Y Summary Statistics for ALMONDS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
07N01E	22	0.0	0.2173	0.0049	0.054	0.1092	0.1149	0.1604	6
07N01W	2	0.075	0.1279	0.0803	0.0882	0.1015	0.1147	0.1226	2
07N02E	22	0.0917	0.3433	0.0924	0.1031	0.1069	0.1306	0.1398	6
08N01E	7	0.0867	0.2854	0.0867	0.0867	0.1468	0.2159	0.2795	1
08N03E	1	0.01	0.01						
09N01E	1	0.113	0.113						
09N02E	5	0.04	0.9	0.0692	0.113	0.12	0.9	0.9	1
10N01E	1	0.11	0.11						
10N01W	9	0.03	0.3	0.07	0.1	0.1067	0.11	0.1746	2
10N02E	7	0.03	0.1	0.042	0.054	0.08	0.085	0.094	2
11N01E	1	0.09	0.09						
12N01W	7	0.0728	0.104	0.0831	0.09	0.09	0.09	0.0956	2
13N01W	9	0.078	0.1	0.0796	0.08	0.0822	0.096	0.0968	2
13N02W	19	0.0486	0.1867	0.0673	0.09	0.102	0.11	0.116	4
14N02W	3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
14N03E	3	0.015	0.23	0.058	0.1225	0.23	0.23	0.23	1
14N05E	4	0.186	0.23	0.186	0.186	0.186	0.197	0.2168	1
15N02E	4	0.025	0.05	0.0295	0.0362	0.04	0.0425	0.047	2
15N02W	3	0.0528	0.089	0.0528	0.0528	0.0528	0.0709	0.0818	1
15N03E	4	0.017	0.14	0.0491	0.0972	0.131	0.1385	0.1394	2
15N03W	4	0.1105	0.1188	0.1105	0.1105	0.1105	0.1126	0.1163	1
16N02W	4	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0
17N02W	2	0.104	0.104	0.104	0.104	0.104	0.104	0.104	0
19N01W	2	0.1033	0.1532	0.1083	0.1158	0.1282	0.1407	0.1482	2
20N01E	39	0.0003	0.21	0.0003	0.0003	0.078	0.1	0.1042	4
20N01W	14	0.013	0.1694	0.0566	0.0758	0.1013	0.1448	0.1532	3
20N02E	25	0.0438	0.166	0.0639	0.067	0.08	0.094	0.1072	6
20N03W	18	0.058	0.132	0.061	0.085	0.085	0.1055	0.117	4
20N04W	3	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0
21N01E	153	0.0016	0.95	0.0288	0.057	0.083	0.1139	0.13	31
21N01W	16	0.0	1.0	0.0	0.0632	0.0945	0.1	0.128	2
21N02E	49	0.013	0.1316	0.051	0.067	0.094	0.1154	0.1202	8
21N02W	41	0.033	0.1687	0.075	0.0968	0.103	0.14	0.1452	5
21N03W	91	0.051	1.0	0.087	0.1	0.12	0.1275	0.21	18
21N04W	10	0.144	0.1856	0.144	0.144	0.144	0.144	0.1482	1

<b>T-R</b>	<b>No. MU-parcels</b>	<b>Min</b>	<b>Max</b>	<b>10%</b>	<b>25%</b>	<b>50%</b>	<b>75%</b>	<b>90%</b>	<b>No. Outliers</b>
22N01E	30	0.0116	0.41	0.0417	0.054	0.0843	0.106	0.168	6
22N01W	12	0.0184	0.1036	0.0243	0.065	0.0916	0.0955	0.1022	4
23N01E	1	0.1513	0.1513						
23N01W	44	0.02	0.255	0.053	0.07	0.0925	0.1333	0.21	8
23N02W	11	0.04	0.172	0.056	0.0735	0.095	0.1058	0.135	2
24N03W	1	0.096	0.096						
25N02W	2	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0
25N03W	1	0.065	0.065						
27N03W	2	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0
Unknown	3	0.03	0.21	0.03	0.03	0.03	0.12	0.174	1

**Table II-2. A/R Summary Statistics for ALMONDS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
07N01E	22	0.0	3.1949	0.0714	0.7949	1.6066	1.6897	2.3584	6
07N01W	2	1.1029	1.8805	1.1807	1.2973	1.4917	1.6861	1.8027	2
07N02E	22	1.3491	5.0493	1.359	1.5164	1.5717	1.9212	2.0556	6
08N01E	7	1.2747	4.1976	1.2747	1.2747	2.1585	3.1752	4.1102	1
08N03E	1	0.1471	0.1471						
09N01E	1	1.6618	1.6618						
09N02E	5	0.5882	13.2353	1.0176	1.6618	1.7647	13.2353	13.2353	1
10N01E	1	1.6176	1.6176						
10N01W	9	0.4418	4.4118	1.0296	1.4706	1.5695	1.6176	2.5686	2
10N02E	7	0.4412	1.4706	0.6177	0.7941	1.1765	1.25	1.3823	2
11N01E	1	1.3235	1.3235						
12N01W	7	1.0706	1.5294	1.2223	1.3235	1.3235	1.3235	1.4059	2
13N01W	9	1.1471	1.4706	1.1706	1.1765	1.2093	1.4118	1.4236	2
13N02W	19	0.7154	2.7449	0.9885	1.3236	1.5	1.6176	1.7058	4
14N02W	3	1.4706	1.4706	1.4706	1.4706	1.4706	1.4706	1.4706	0
14N03E	3	3.382	29411.765	3.382	3.382	3.382	14707.5735	23530.0884	1
14N05E	4	2.735	3.382	2.735	2.735	2.735	2.8968	3.1879	1
15N02E	4	0.368	0.735	0.434	0.533	0.588	0.6247	0.6909	2
15N02W	3	0.7761	1.3088	0.7761	0.7761	0.7761	1.0425	1.2023	1
15N03E	4	0.25	2.059	0.7222	1.4305	1.9265	2.0365	2.05	2
15N03W	4	1.625	1.7468	1.625	1.625	1.625	1.6554	1.7103	1
16N02W	4	0.8971	0.8971	0.8971	0.8971	0.8971	0.8971	0.8971	0
17N02W	2	1.5294	1.5294	1.5294	1.5294	1.5294	1.5294	1.5294	0
19N01W	2	1.5191	2.2529	1.5925	1.7026	1.886	2.0694	2.1795	2
20N01E	39	0.004	3.088	0.004	0.004	1.147	1.471	1.532	4
20N01W	14	0.1913	2.4912	0.8324	1.1147	1.4891	2.1285	2.2529	3
20N02E	25	0.644	2.441	0.94	0.985	1.176	1.382	1.5764	6
20N03W	18	0.8529	1.9412	0.8971	1.25	1.25	1.5514	1.7206	2
20N04W	3	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647	0
21N01E	153	0.024	1250.0	0.4232	0.868	1.265	1.707	1.9304	32
21N01W	16	0.5882	2.294	0.5882	0.9302	1.3897	1.4706	1.7214	2
21N02E	49	0.191	1147.059	0.75	0.985	1.382	1.697	1.809	8
21N02W	41	0.4853	2.4805	1.1029	1.4235	1.5147	2.0588	2.1347	5
21N03W	91	0.75	3.0882	1.0306	1.3235	1.6793	1.7794	1.9118	10
21N04W	10	2.1176	2.7292	2.1176	2.1176	2.1176	2.1176	2.1788	1

<b>T-R</b>	<b>No. MU-parcels</b>	<b>Min</b>	<b>Max</b>	<b>10%</b>	<b>25%</b>	<b>50%</b>	<b>75%</b>	<b>90%</b>	<b>No. Outliers</b>
22N01E	30	0.171	6.029	0.6129	0.7942	1.24	1.559	2.4707	6
22N01W	12	0.735	628.529	1.0322	1.27	1.3765	1.5112	487.7409	4
23N01E	1	2.225	2.225						
23N01W	44	0.294	3.75	0.7791	1.029	1.3605	1.961	3.088	8
23N02W	11	0.5882	2.5294	0.8235	1.0808	1.3971	1.5551	1.985	2
24N03W	1	1.4118	1.4118						
25N02W	2	0.9559	0.9559	0.9559	0.9559	0.9559	0.9559	0.9559	0
25N03W	1	0.9559	0.9559						
27N03W	2	1.0294	1.0294	1.0294	1.0294	1.0294	1.0294	1.0294	0
Unknown	3	0.441	3.088	0.441	0.441	0.441	1.7645	2.5586	1

**Table II-3. A-R Summary Statistics for ALMONDS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
07N01E	22	-489.6	229.68	-72.42	-41.34	18.2	70.35	160.62	6
07N01W	2	4.0	23.41	5.94	8.85	13.71	18.56	21.47	2
07N02E	22	-0.63	166.53	8.13	15.41	31.09	58.33	83.31	6
08N01E	7	-26.84	119.96	-26.84	-26.84	53.8	89.77	118.45	1
08N03E	1	-46.98	-46.98						
09N01E	1	94.78	94.78						
09N02E	5	-113.4	129.42	-56.08	29.9	94.78	129.42	129.42	1
10N01E	1	77.51	77.51						
10N01W	9	-88.46	126.83	-12.32	15.0	51.55	67.2	88.94	2
10N02E	7	-301.47	32.96	-131.39	-15.38	22.48	22.95	26.95	2
11N01E	1	40.05	40.05						
12N01W	7	9.89	57.91	13.93	16.62	39.84	42.53	48.68	2
13N01W	9	22.1	80.0	24.42	25.0	30.0	60.0	64.0	2
13N02W	19	-36.0	114.0	-1.6	33.5	52.42	86.0	87.2	4
14N02W	3	80.0	80.0	80.0	80.0	80.0	80.0	80.0	0
14N03E	3	30.0	176.1	59.22	103.05	176.1	176.1	176.1	1
14N05E	4	118.35	176.1	118.35	118.35	118.35	132.79	158.78	1
15N02E	4	-120.4	-37.8	-99.4	-67.9	-50.4	-47.25	-41.58	2
15N02W	3	-22.0	42.0	-22.0	-22.0	-22.0	10.0	29.2	1
15N03E	4	-362.02	129.6	-240.78	-58.93	46.35	70.35	105.9	2
15N03W	4	100.02	107.82	100.02	100.02	100.02	101.97	105.48	1
16N02W	4	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	-16.0	0
17N02W	2	90.0	90.0	90.0	90.0	90.0	90.0	90.0	0
19N01W	2	53.0	161.0	63.8	80.0	107.0	134.0	150.2	2
20N01E	39	-45584.67	203.5	-45584.67	-45584.67	20.0	50.4	65.3	4
20N01W	14	-135.0	174.0	-16.8	15.0	63.0	145.0	161.0	3
20N02E	25	-51.7	129.9	-7.34	-1.8	22.5	51.2	75.08	6
20N03W	18	-22.0	74.0	-18.0	37.5	39.75	66.25	72.6	3
20N04W	3	-49.0	-49.0	-49.0	-49.0	-49.0	-49.0	-49.0	0
21N01E	153	-655.0	390.3	-93.26	-16.2	25.4	64.5	105.0	30
21N01W	16	-175.0	112.0	-175.0	-12.23	55.0	80.0	80.9	2
21N02E	49	-634.6	115.0	-18.35	-1.8	51.2	76.0	80.3	7
21N02W	41	-46.0	120.0	11.0	43.0	50.4	115.0	120.0	4
21N03W	91	-22.12	134.0	5.0	35.5	55.0	93.0	110.0	12
21N04W	10	114.0	159.5	114.0	114.0	114.0	114.0	118.55	1

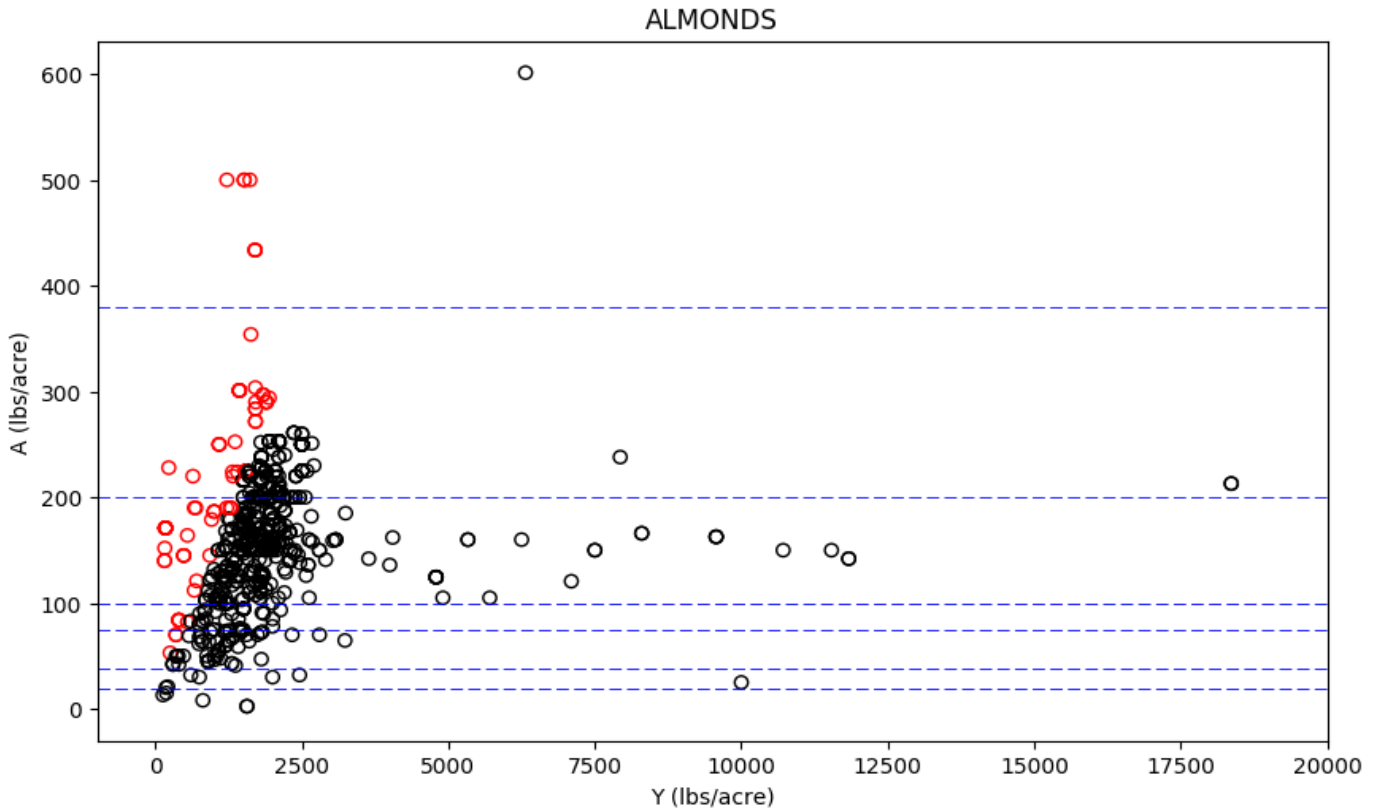
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
22N01E	30	-1035.6	417.1	-37.39	-17.4	26.4	44.8	194.29	6
22N01W	12	-32.8	104.8	4.22	21.8	50.25	68.88	101.26	4
23N01E	1	161.9	161.9						
23N01W	44	-360.0	317.99	-20.86	3.9	36.25	77.4	163.89	10
23N02W	11	-73.5	73.16	-29.57	-5.84	29.84	38.18	47.73	2
24N03W	1	32.38	32.38						
25N02W	2	-6.92	-6.92	-6.92	-6.92	-6.92	-6.92	-6.92	0
25N03W	1	-6.92	-6.92						
27N03W	2	3.43	3.43	3.43	3.43	3.43	3.43	3.43	0
Unknown	3	-202.7	56.8	-202.7	-202.7	-202.7	-72.95	4.9	1

**Table II-4. Summary Statistics for ALMONDS management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	712	0.0	1.0	0.0439	0.07	0.0964	0.12	0.1452	143
A/R	712	0.0	29411.765	0.716	1.029	1.4059	1.7647	2.1344	144
A-R	712	-45584.67	417.1	-41.34	2.73	42.0	77.4	114.0	142

**Figure II-2. Scatter plot of A vs. Y for ALMONDS with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.

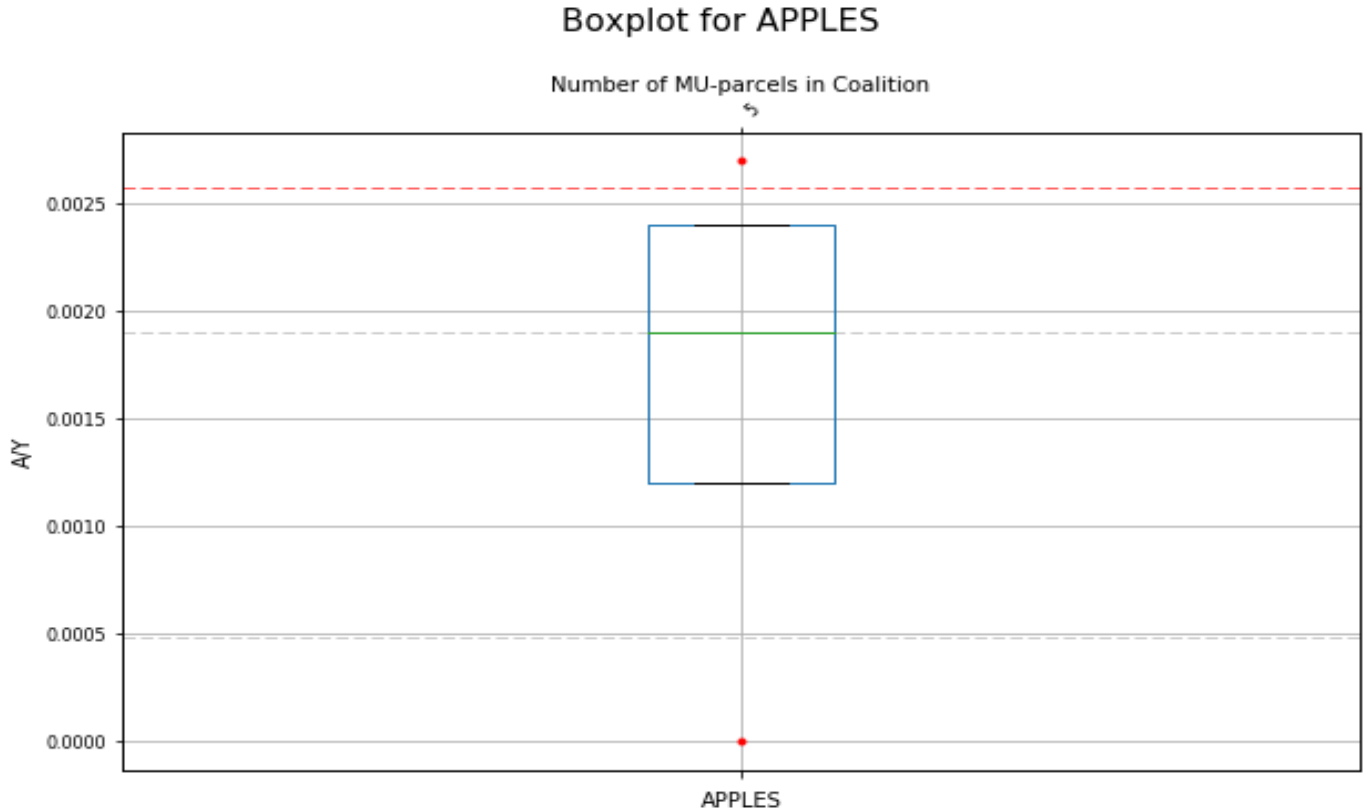


NOTE: 15 records above Yield value of 20000 lbs/acre not shown to avoid skewing of scatter plot

# III. APPLES

**Figure III-1. Box and Whisker plots of A/Y for APPLES management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table III-1. A/Y Summary Statistics for APPLES management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
5	0.0	0.0027	0.0005	0.0012	0.0019	0.0024	0.0026	2

**Table III-2. A/R Summary Statistics for APPLES management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
5	0.0	5.0463	0.9259	2.3148	3.5556	4.3981	4.787	2



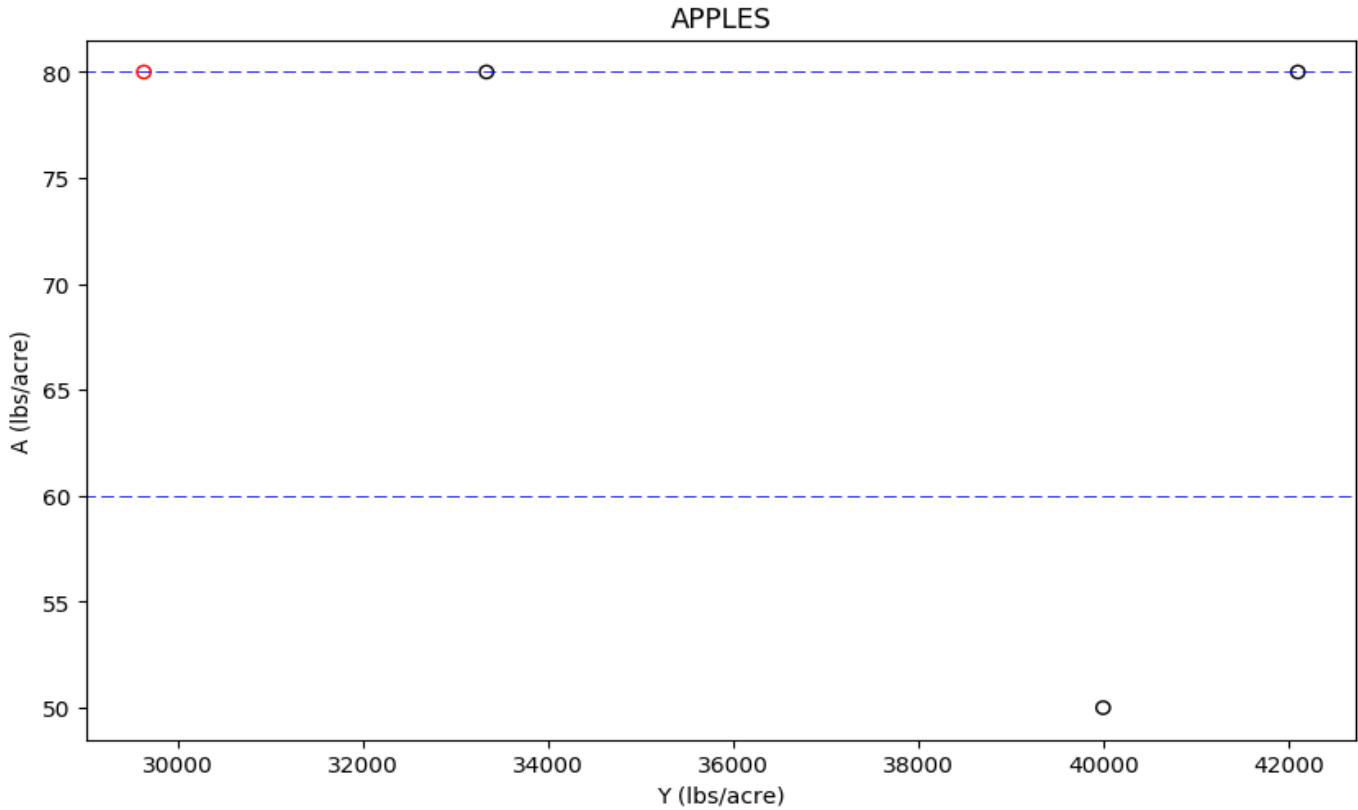
**Table III-3. A-R Summary Statistics for APPLES management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
5	-12.53	64.15	3.84	28.4	57.5	61.81	63.21	2

**Figure III-2. Scatter plot of A vs. Y for APPLES with all T-R together.**

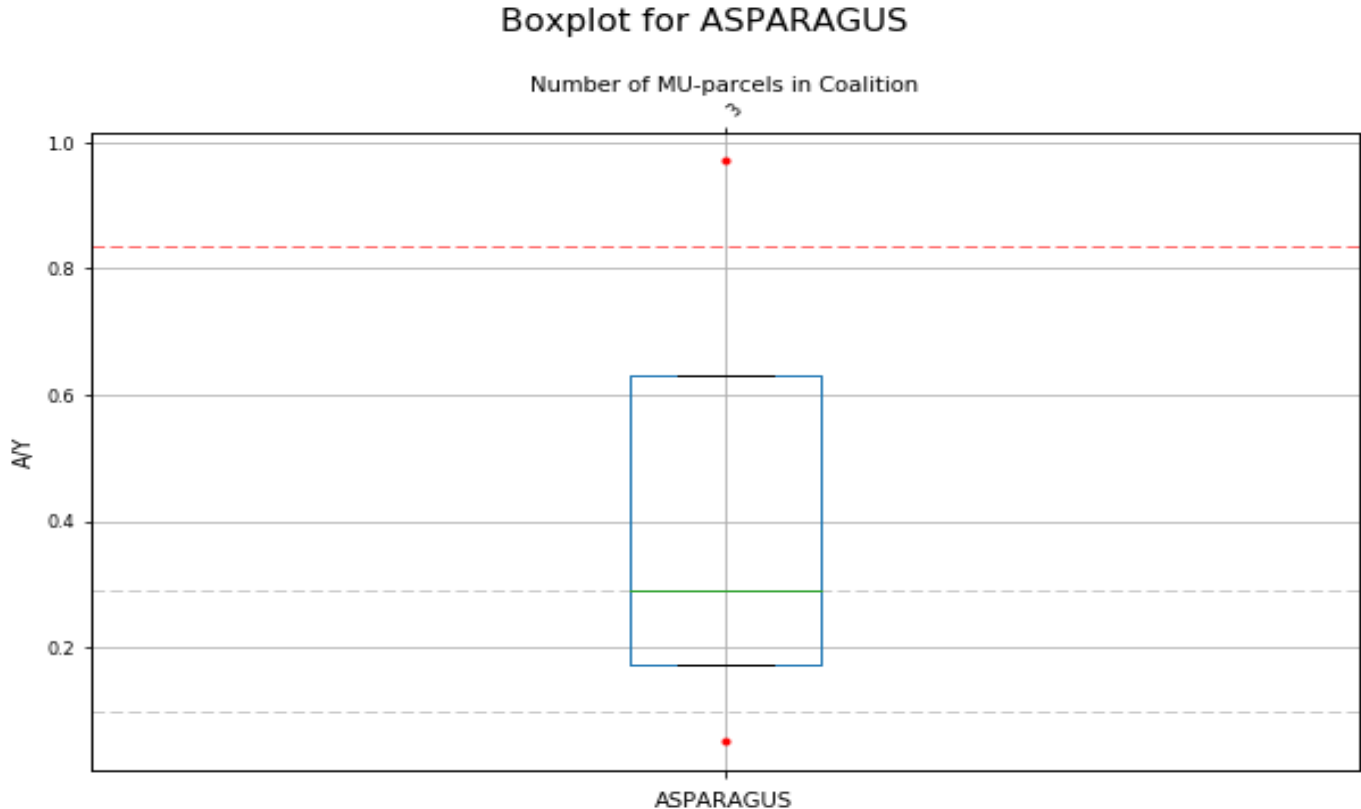
Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# IV. ASPARAGUS

**Figure IV-1. Box and Whisker plots of A/Y for ASPARAGUS management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table IV-1. A/Y Summary Statistics for ASPARAGUS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
3	0.052	0.97	0.0997	0.1712	0.2904	0.6302	0.8341	2

**Table IV-2. A/R Summary Statistics for ASPARAGUS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
3	17.7474	332.0	34.0176	58.423	99.0985	215.5492	285.4197	2

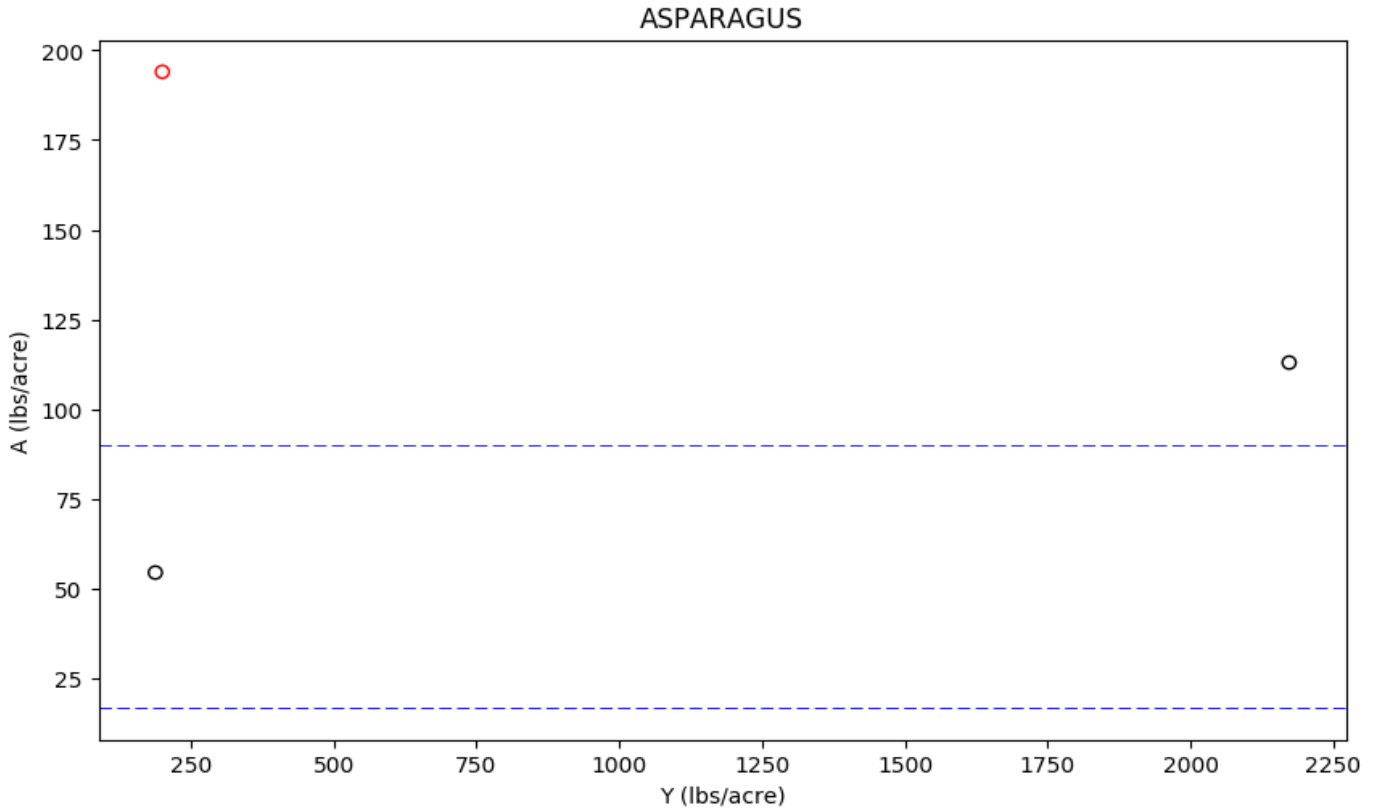
**Table IV-3. A-R Summary Statistics for ASPARAGUS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
3	53.19	193.42	63.88	79.91	106.63	150.02	176.06	2

**Figure IV-2. Scatter plot of A vs. Y for ASPARAGUS with all T-R together.**

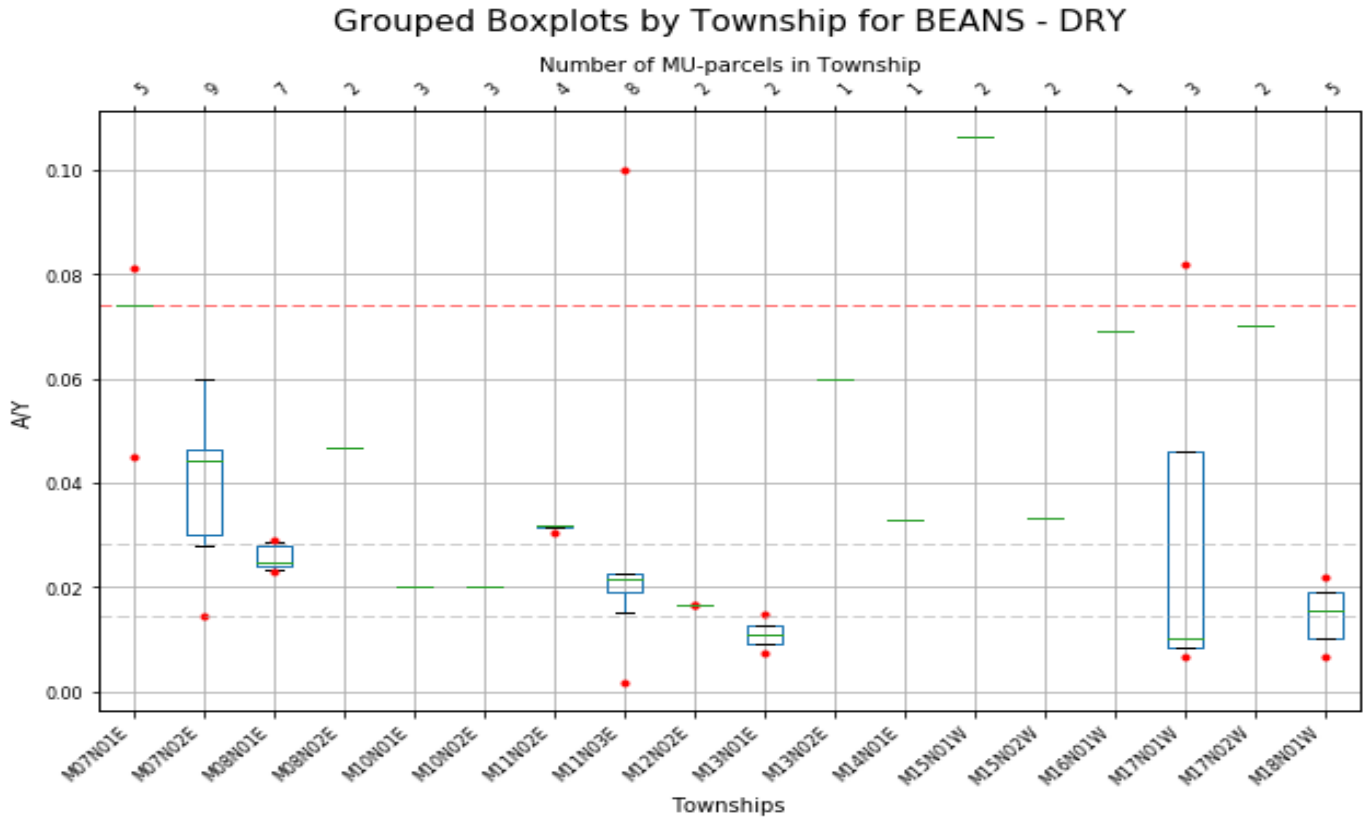
Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# V. BEANS - DRY

**Figure V-1. Box and Whisker plots of A/Y for BEANS - DRY management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers ( $A/Y > 90\%$  percentile or  $< 10\%$  percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table V-1. A/Y Summary Statistics for BEANS - DRY management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
07N01E	5	0.0451	0.0813	0.0567	0.0741	0.0741	0.0741	0.0784	2
07N02E	9	0.0146	0.06	0.0253	0.03	0.0441	0.0464	0.06	1
08N01E	7	0.0229	0.029	0.0233	0.0241	0.0248	0.028	0.0288	2
08N02E	2	0.0469	0.0469	0.0469	0.0469	0.0469	0.0469	0.0469	0
10N01E	3	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0
10N02E	3	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0
11N02E	4	0.0305	0.0317	0.0309	0.0314	0.0317	0.0317	0.0317	1
11N03E	8	0.0018	0.1	0.0113	0.0193	0.0217	0.0227	0.0459	2
12N02E	2	0.0166	0.0167	0.0166	0.0166	0.0166	0.0167	0.0167	2
13N01E	2	0.0073	0.0147	0.008	0.0092	0.011	0.0128	0.014	2
13N02E	1	0.06	0.06						
14N01E	1	0.033	0.033						
15N01W	2	0.1062	0.1062	0.1062	0.1062	0.1062	0.1062	0.1062	0
15N02W	2	0.0333	0.0333	0.0333	0.0333	0.0333	0.0333	0.0333	0
16N01W	1	0.0692	0.0692						
17N01W	3	0.0067	0.082	0.0074	0.0085	0.0102	0.0461	0.0676	2
17N02W	2	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0
18N01W	5	0.0067	0.0221	0.0081	0.0102	0.0155	0.019	0.0209	2

**Table V-2. A/R Summary Statistics for BEANS - DRY management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
07N01E	5	1.2472	2.2481	1.5685	2.0505	2.0505	2.0505	2.1691	2
07N02E	9	0.4044	1.6598	0.7002	0.8299	1.2209	1.2846	1.6598	1
08N01E	7	0.6345	0.8018	0.6439	0.6674	0.6847	0.7732	0.7971	2
08N02E	2	1.2971	1.2971	1.2971	1.2971	1.2971	1.2971	1.2971	0
10N01E	3	0.5952	0.5952	0.5952	0.5952	0.5952	0.5952	0.5952	0
10N02E	3	0.5952	0.5952	0.5952	0.5952	0.5952	0.5952	0.5952	0
11N02E	4	476.003	3049.087	476.003	476.003	476.003	1119.274	2277.1618	1
11N03E	8	357.143	2772853.23	701.9322	1424.088	1615.551	1682.082	833033.4264	2
12N02E	2	290835.05	292587.069	291010.2519	291273.0548	291711.0595	292149.0642	292411.8671	2
13N01E	2	22207.348	45027.313	24489.3445	27912.3393	33617.3305	39322.3218	42745.3165	2
13N02E	1	5440.8	5440.8						
14N01E	1	0.9821	0.9821						
15N01W	2	3.1602	3.1602	3.1602	3.1602	3.1602	3.1602	3.1602	0
15N02W	2	0.9921	0.9921	0.9921	0.9921	0.9921	0.9921	0.9921	0
16N01W	1	2.0604	2.0604						
17N01W	3	0.1985	2.4405	0.2195	0.251	0.3036	1.372	2.0131	2
17N02W	2	2.0833	2.0833	2.0833	2.0833	2.0833	2.0833	2.0833	0
18N01W	5	0.1985	0.6565	0.2405	0.3036	0.4626	0.5655	0.6201	2

**Table V-3. A-R Summary Statistics for BEANS - DRY management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

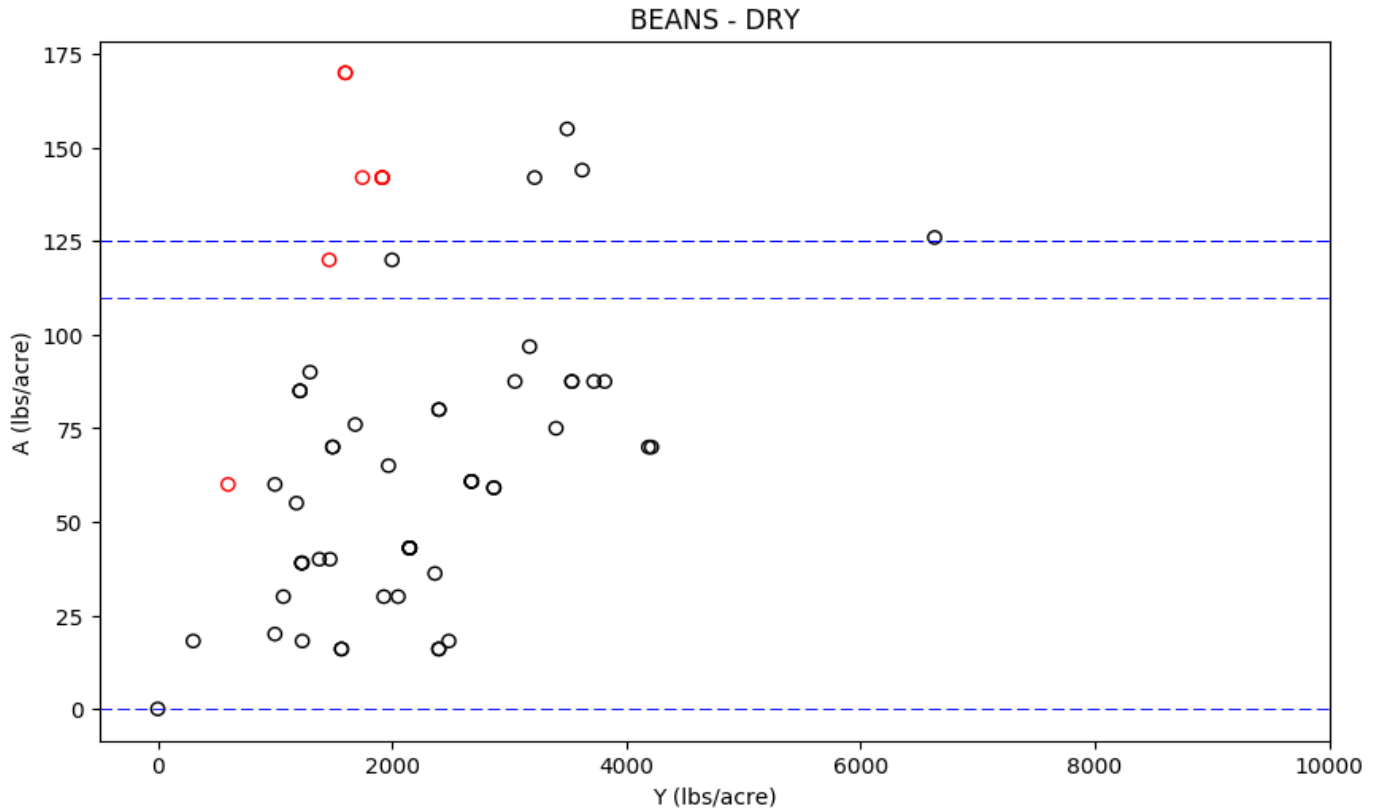
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
07N01E	5	-8.59	61.04	18.09	58.12	58.12	58.12	59.87	2
07N02E	9	-72.3	47.7	-49.8	-15.06	-8.75	12.36	20.27	2
08N01E	7	-50.41	-22.72	-50.39	-48.73	-44.81	-40.29	-33.26	2
08N02E	2	-3.24	-3.24	-3.24	-3.24	-3.24	-3.24	-3.24	0
10N01E	3	-29.24	-13.6	-29.24	-29.24	-29.24	-21.42	-16.73	1
10N02E	3	-29.24	-29.24	-29.24	-29.24	-29.24	-29.24	-29.24	0
11N02E	4	38.92	96.79	38.92	38.92	38.92	53.39	79.43	1
11N03E	8	36.16	70.93	52.19	59.06	60.3	60.76	63.81	2
12N02E	2	69.97	69.97	69.97	69.97	69.97	69.97	69.97	0
13N01E	2	18.14	18.14	18.14	18.14	18.14	18.14	18.14	2
13N02E	1	18.14	18.14						
14N01E	1	-1.0	-1.0						
15N01W	2	116.0	116.0	116.0	116.0	116.0	116.0	116.0	0
15N02W	2	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	0
16N01W	1	46.0	46.0						
17N01W	3	-65.0	71.0	-59.4	-51.0	-37.0	17.0	49.4	2
17N02W	2	44.0	44.0	44.0	44.0	44.0	44.0	44.0	0
18N01W	5	-97.0	-35.0	-84.2	-65.0	-39.0	-37.0	-35.8	2

**Table V-4. Summary Statistics for BEANS - DRY management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	62	0.0018	0.1062	0.0146	0.02	0.0284	0.0468	0.0741	12
A/R	62	0.1985	2772853.23	0.5685	0.6636	1.2908	446.288	2912.3865	14
A-R	62	-97.0	116.0	-46.86	-29.24	-1.0	58.12	69.08	14

**Figure V-2. Scatter plot of A vs. Y for BEANS - DRY with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



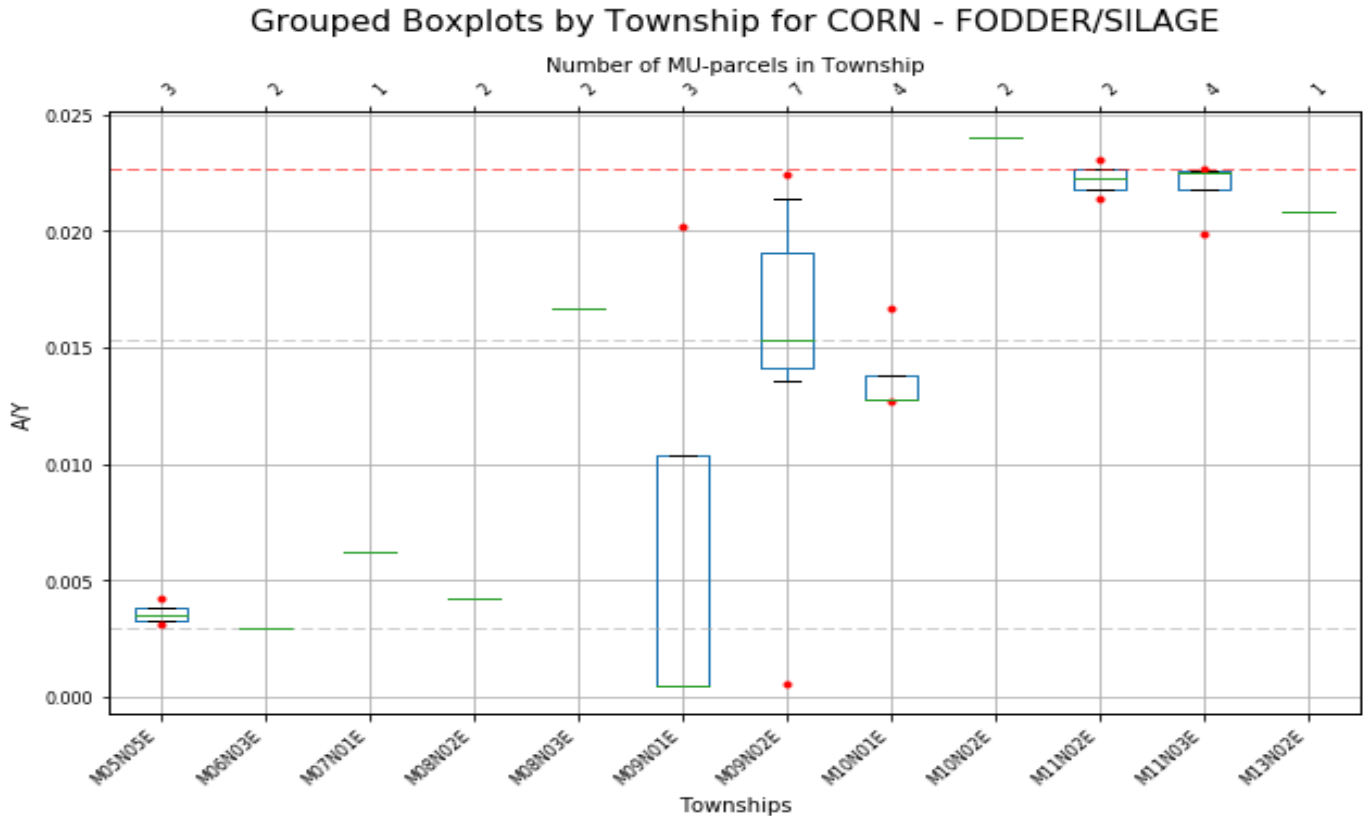
NOTE: 1 records above Yield value of 10000 lbs/acre not shown to avoid skewing of scatter plot



## VI. CORN - FODDER/SILAGE

**Figure VI-1. Box and Whisker plots of A/Y for CORN - FODDER/SILAGE management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table VI-1. A/Y Summary Statistics for CORN - FODDER/SILAGE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N05E	3	0.0031	0.0042	0.0032	0.0033	0.0035	0.0038	0.0041	2
06N03E	2	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0
07N01E	1	0.0062	0.0062						
08N02E	2	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0
08N03E	2	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0
09N01E	3	0.0005	0.0202	0.0005	0.0005	0.0005	0.0104	0.0163	1
09N02E	7	0.0006	0.0224	0.0084	0.0142	0.0153	0.0191	0.0218	2
10N01E	4	0.0127	0.0167	0.0127	0.0128	0.0128	0.0138	0.0155	2
10N02E	2	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0
11N02E	2	0.0214	0.0231	0.0216	0.0218	0.0222	0.0227	0.0229	2
11N03E	4	0.0199	0.0227	0.0207	0.0218	0.0225	0.0226	0.0227	2
13N02E	1	0.0208	0.0208						

**Table VI-2. A/R Summary Statistics for CORN - FODDER/SILAGE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N05E	3	0.8267	1.1111	0.8444	0.871	0.9153	1.0132	1.0719	2
06N03E	2	0.7937	0.7937	0.7937	0.7937	0.7937	0.7937	0.7937	0
07N01E	1	1.6534	1.6534						
08N02E	2	1.1243	1.1243	1.1243	1.1243	1.1243	1.1243	1.1243	0
08N03E	2	4.4048	4.4048	4.4048	4.4048	4.4048	4.4048	4.4048	0
09N01E	3	0.1429	5.3519	0.1429	0.1429	0.1429	2.7474	4.3101	1
09N02E	7	0.1534	5.9312	2.2153	3.7454	4.0437	5.0536	5.7725	2
10N01E	4	3.3545	4.4048	3.3652	3.3813	3.3902	3.6438	4.1004	2
10N02E	2	6.3492	6.3492	6.3492	6.3492	6.3492	6.3492	6.3492	0
11N02E	2	5.669	6.1045	5.7126	5.7779	5.8867	5.9956	6.0609	2
11N03E	4	5.271	6.007	5.4654	5.757	5.9425	5.9762	5.9947	2
13N02E	1	5.511	5.511						

**Table VI-3. A-R Summary Statistics for CORN - FODDER/SILAGE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

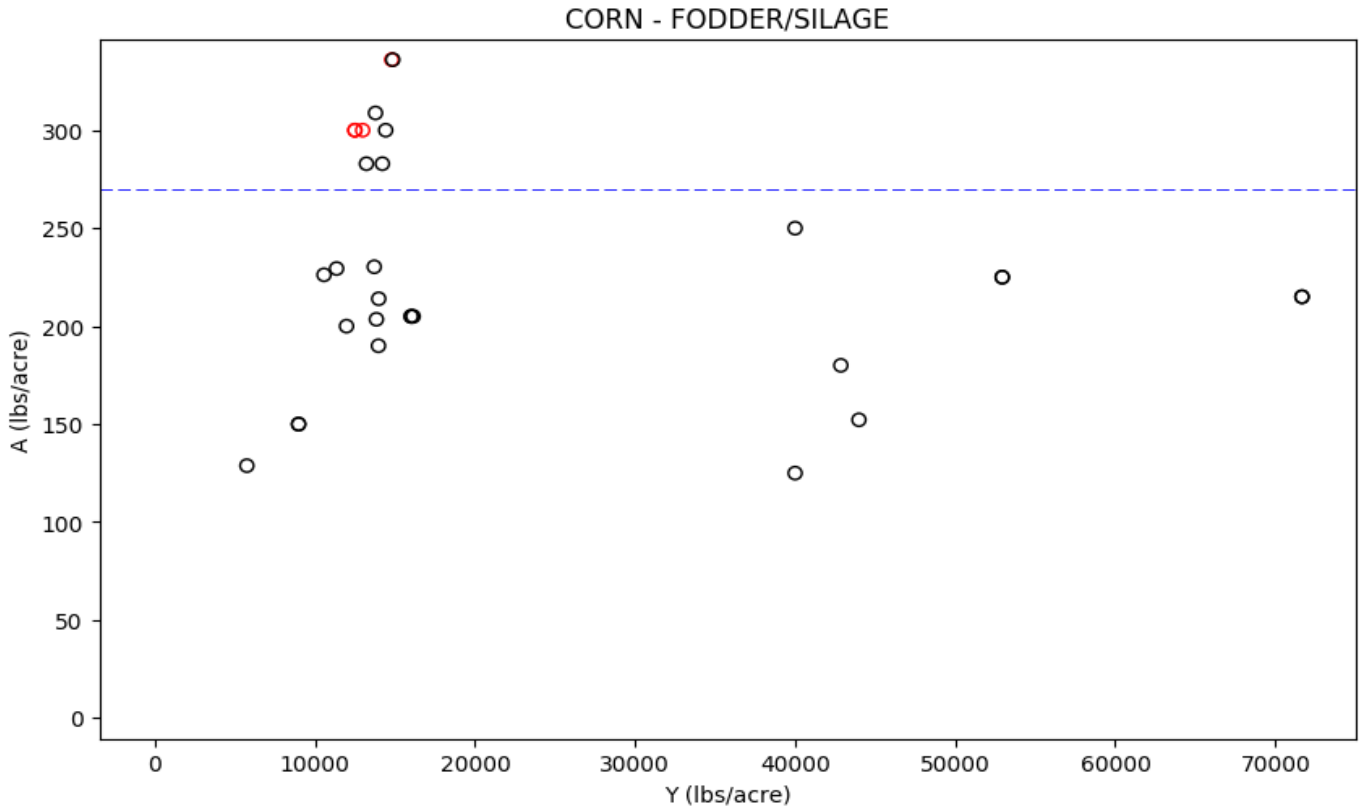
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N05E	3	-26.2	18.0	-23.78	-20.14	-14.08	1.96	11.58	2
06N03E	2	-55.9	-55.9	-55.9	-55.9	-55.9	-55.9	-55.9	0
07N01E	1	89.73	89.73						
08N02E	2	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	0
08N03E	2	115.95	115.95	115.95	115.95	115.95	115.95	115.95	0
09N01E	3	-1200.0	186.54	-1200.0	-1200.0	-1200.0	-506.73	-90.77	1
09N02E	7	-1103.45	186.28	-377.13	122.08	151.33	169.76	181.57	2
10N01E	4	143.89	154.59	144.08	144.37	144.53	147.05	151.58	2
10N02E	2	252.75	252.75	252.75	252.75	252.75	252.75	252.75	0
11N02E	2	233.0	250.86	234.79	237.46	241.93	246.39	249.07	2
11N03E	4	229.2	280.1	237.42	249.75	268.15	279.8	279.98	2
13N02E	1	245.6	245.6						

**Table VI-4. Summary Statistics for CORN - FODDER/SILAGE management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	33	0.0005	0.024	0.003	0.0042	0.0153	0.0214	0.0227	7
A/R	33	0.1429	6.3492	0.7937	1.1243	4.0437	5.6667	5.9988	7
A-R	33	-1200.0	280.1	-55.9	-1.8	144.53	229.2	252.75	6

**Figure VI-2. Scatter plot of A vs. Y for CORN - FODDER/SILAGE with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.

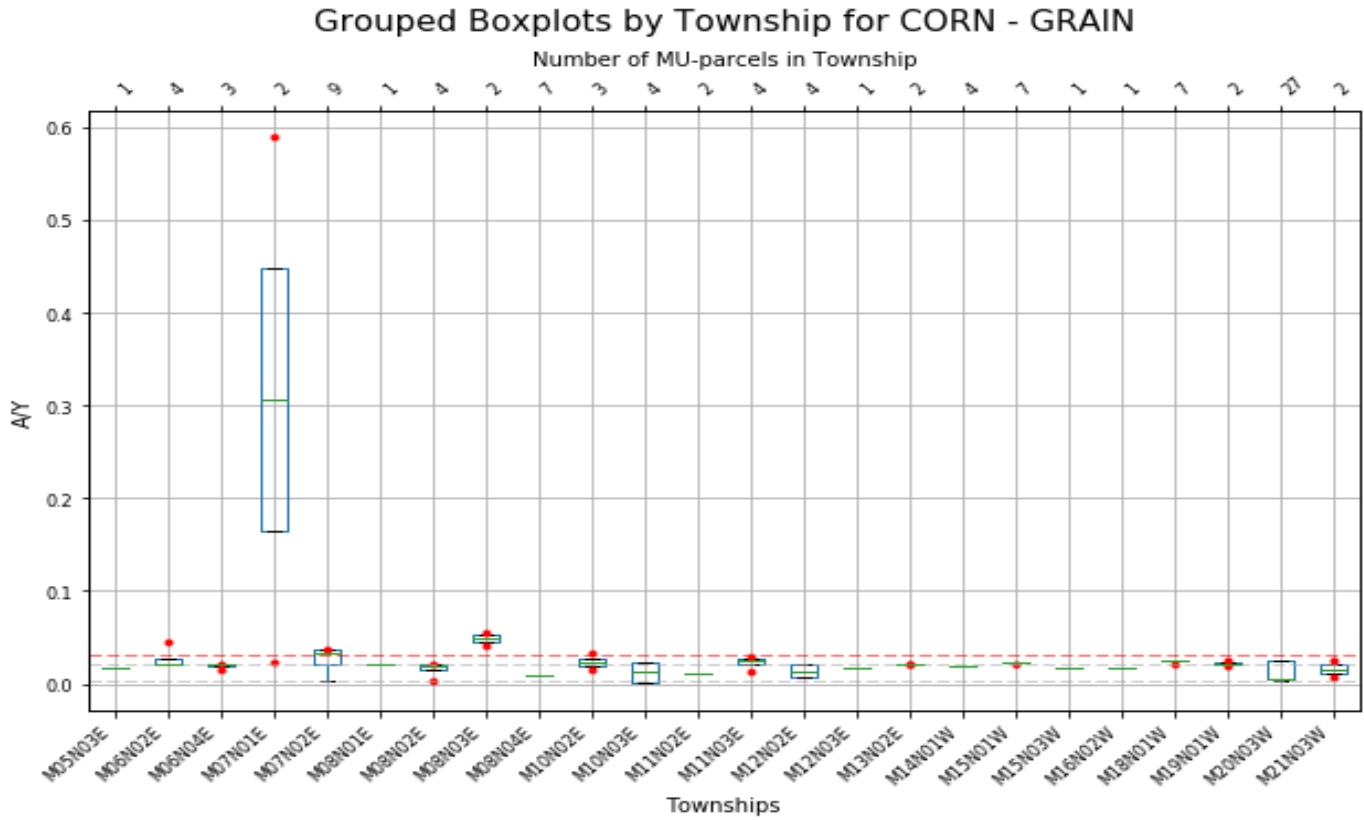


NOTE: 3 records above Yield value of 75000 lbs/acre not shown to avoid skewing of scatter plot

# VII. CORN - GRAIN

**Figure VII-1. Box and Whisker plots of A/Y for CORN - GRAIN management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table VII-1. A/Y Summary Statistics for CORN - GRAIN management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N03E	1	0.0179	0.0179						
06N02E	4	0.0202	0.0457	0.0202	0.0202	0.0202	0.0266	0.038	1
06N04E	3	0.0156	0.022	0.0168	0.0186	0.0217	0.0218	0.0219	2
07N01E	2	0.0229	0.5896	0.0796	0.1646	0.3062	0.4479	0.5329	2
07N02E	9	0.0027	0.038	0.0027	0.0214	0.0335	0.0366	0.0369	1
08N01E	1	0.0202	0.0202						
08N02E	4	0.0033	0.0217	0.0082	0.0155	0.0196	0.0201	0.0211	2
08N03E	2	0.0406	0.056	0.0421	0.0444	0.0483	0.0522	0.0545	2
08N04E	7	0.0094	0.0094	0.0094	0.0094	0.0094	0.0094	0.0094	0
10N02E	3	0.0149	0.0323	0.0167	0.0193	0.0237	0.028	0.0306	2
10N03E	4	0.0013	0.0237	0.0013	0.0013	0.0125	0.0237	0.0237	0
11N02E	2	0.0118	0.0118	0.0118	0.0118	0.0118	0.0118	0.0118	0
11N03E	4	0.0123	0.029	0.0155	0.0203	0.0246	0.0268	0.0281	2
12N02E	4	0.0069	0.0208	0.0069	0.0069	0.0138	0.0208	0.0208	0
12N03E	1	0.018	0.018						
13N02E	2	0.0211	0.0219	0.0212	0.0213	0.0215	0.0217	0.0218	2
14N01W	4	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196	0
15N01W	7	0.0208	0.023	0.0221	0.023	0.023	0.023	0.023	1
15N03W	1	0.0172	0.0172						
16N02W	1	0.0172	0.0172						
18N01W	7	0.0219	0.0247	0.0236	0.0247	0.0247	0.0247	0.0247	1
19N01W	2	0.019	0.0247	0.0196	0.0204	0.0218	0.0233	0.0241	2
20N03W	27	0.003	0.0255	0.003	0.0044	0.005	0.0255	0.0255	0
21N03W	2	0.0063	0.025	0.0082	0.011	0.0156	0.0203	0.0231	2

**Table VII-2. A/R Summary Statistics for CORN - GRAIN management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N03E	1	1.4931	1.4931						
06N02E	4	1.687	3.8091	1.687	1.687	1.687	2.2175	3.1725	1
06N04E	3	1.3021	1.8304	1.403	1.5544	1.8067	1.8186	1.8257	2
07N01E	2	1.9104	49.1369	6.633	13.717	25.5236	37.3303	44.4142	2
07N02E	9	0.2273	3.1683	0.2273	1.7872	2.7917	3.0464	3.0708	1
08N01E	1	1.6846	1.6846						
08N02E	4	0.2778	1.8125	0.6848	1.2954	1.6346	1.6791	1.7591	2
08N03E	2	3.381	4.6667	3.5096	3.7024	4.0238	4.3453	4.5381	2
08N04E	7	0.7812	0.7812	0.7812	0.7812	0.7812	0.7812	0.7812	0
10N02E	3	1.2381	2.6944	1.3849	1.6052	1.9722	2.3333	2.55	2
10N03E	4	0.1096	1.9722	0.1096	0.1096	1.0409	1.9722	1.9722	0
11N02E	2	0.9861	0.9861	0.9861	0.9861	0.9861	0.9861	0.9861	0
11N03E	4	1.025	2.419	1.2926	1.694	2.046	2.236	2.3458	2
12N02E	4	0.575	1.736	0.575	0.575	1.1555	1.736	1.736	0
12N03E	1	1.5	1.5						
13N02E	2	1.759	1.825	1.7656	1.7755	1.792	1.8085	1.8184	2
14N01W	4	1.6369	1.6369	1.6369	1.6369	1.6369	1.6369	1.6369	0
15N01W	7	1.7361	1.9167	1.8445	1.9167	1.9167	1.9167	1.9167	1
15N03W	1	1.4323	1.4323						
16N02W	1	1.4323	1.4323						
18N01W	7	1.8229	2.0599	1.9651	2.0599	2.0599	2.0599	2.0599	1
19N01W	2	1.5833	2.0599	1.631	1.7024	1.8216	1.9408	2.0122	2
20N03W	27	0.7937	2.125	0.7937	1.1606	1.3122	2.125	2.125	0
21N03W	2	1.6746	2.0833	1.7155	1.7768	1.879	1.9811	2.0424	2

**Table VII-3. A-R Summary Statistics for CORN - GRAIN management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

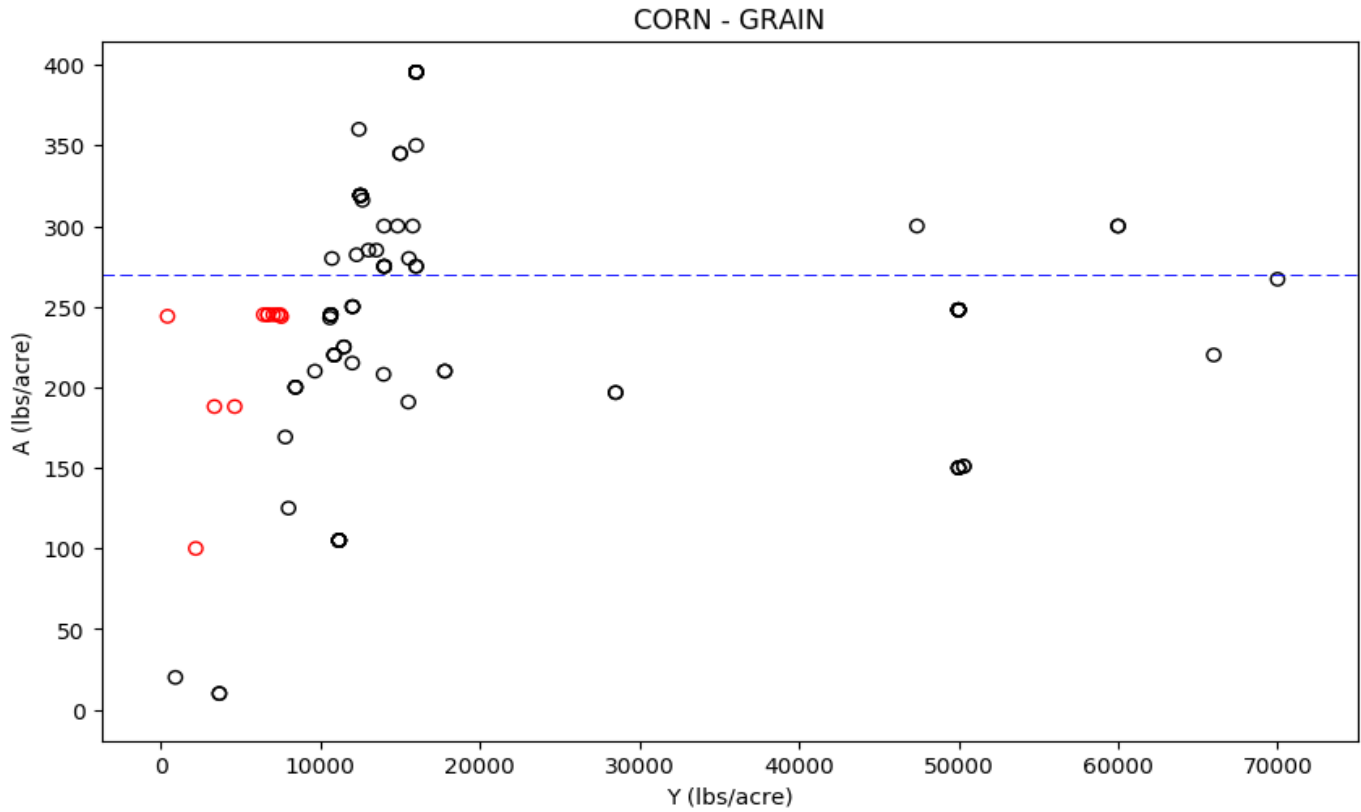
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N03E	1	71.0	71.0						
06N02E	4	73.43	82.48	76.15	80.22	82.48	82.48	82.48	1
06N04E	3	9.07	75.5	13.06	19.04	29.0	52.25	66.2	2
07N01E	2	115.8	237.57	127.98	146.24	176.69	207.13	225.4	2
07N02E	9	-122.0	167.67	-122.0	110.88	157.24	164.58	165.2	1
08N01E	1	121.92	121.92						
08N02E	4	-572.0	69.0	-382.26	-97.64	64.74	69.0	69.0	1
08N03E	2	132.39	147.71	133.93	136.22	140.05	143.88	146.18	2
08N04E	7	-29.4	-29.4	-29.4	-29.4	-29.4	-29.4	-29.4	0
10N02E	3	40.0	153.32	51.72	69.3	98.59	125.95	142.37	2
10N03E	4	-2135.37	98.59	-2135.37	-2135.37	-1018.39	98.59	98.59	0
11N02E	2	-2.96	-2.96	-2.96	-2.96	-2.96	-2.96	-2.96	0
11N03E	4	4.61	211.2	43.72	102.38	143.07	166.18	193.19	2
12N02E	4	-145.42	106.0	-145.42	-145.42	-19.71	106.0	106.0	0
12N03E	1	93.27	93.27						
13N02E	2	123.0	128.8	123.58	124.45	125.9	127.35	128.22	2
14N01W	4	107.0	107.0	107.0	107.0	107.0	107.0	107.0	0
15N01W	7	106.0	165.0	112.6	117.0	117.0	141.0	165.0	1
15N03W	1	83.0	83.0						
16N02W	1	83.0	83.0						
18N01W	7	158.0	203.5	185.3	203.5	203.5	203.5	203.5	1
19N01W	2	111.0	203.5	120.25	134.12	157.25	180.38	194.25	2
20N03W	27	-39.0	169.0	-39.0	30.5	59.0	169.0	169.0	0
21N03W	2	121.0	164.0	125.3	131.75	142.5	153.25	159.7	2

**Table VII-4. Summary Statistics for CORN - GRAIN management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	104	0.0013	0.5896	0.0035	0.0069	0.0202	0.0247	0.0313	22
A/R	104	0.1096	49.1369	0.7812	1.3097	1.687	2.0599	2.6118	18
A-R	104	-2135.37	237.57	-39.0	37.25	98.59	155.73	169.0	16

**Figure VII-2. Scatter plot of A vs. Y for CORN - GRAIN with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



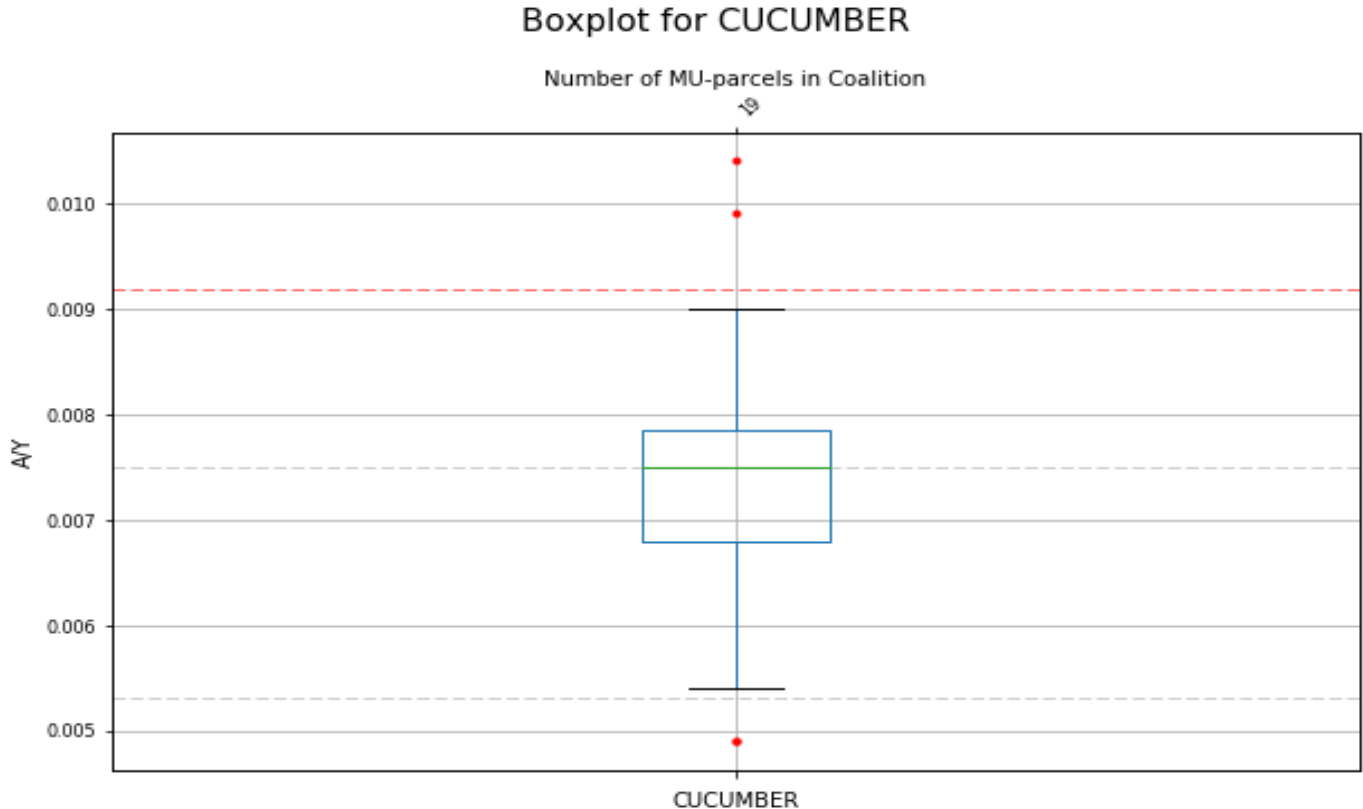
NOTE: 2 records above Yield value of 75000 lbs/acre not shown to avoid skewing of scatter plot



# VIII. CUCUMBER

**Figure VIII-1. Box and Whisker plots of A/Y for CUCUMBER management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table VIII-1. A/Y Summary Statistics for CUCUMBER management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
19	0.0049	0.0104	0.0053	0.0068	0.0075	0.0078	0.0092	4

**Table VIII-2. A/R Summary Statistics for CUCUMBER management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
19	4.5417	9.6309	4.9167	6.2824	6.9444	7.269	8.4603	4

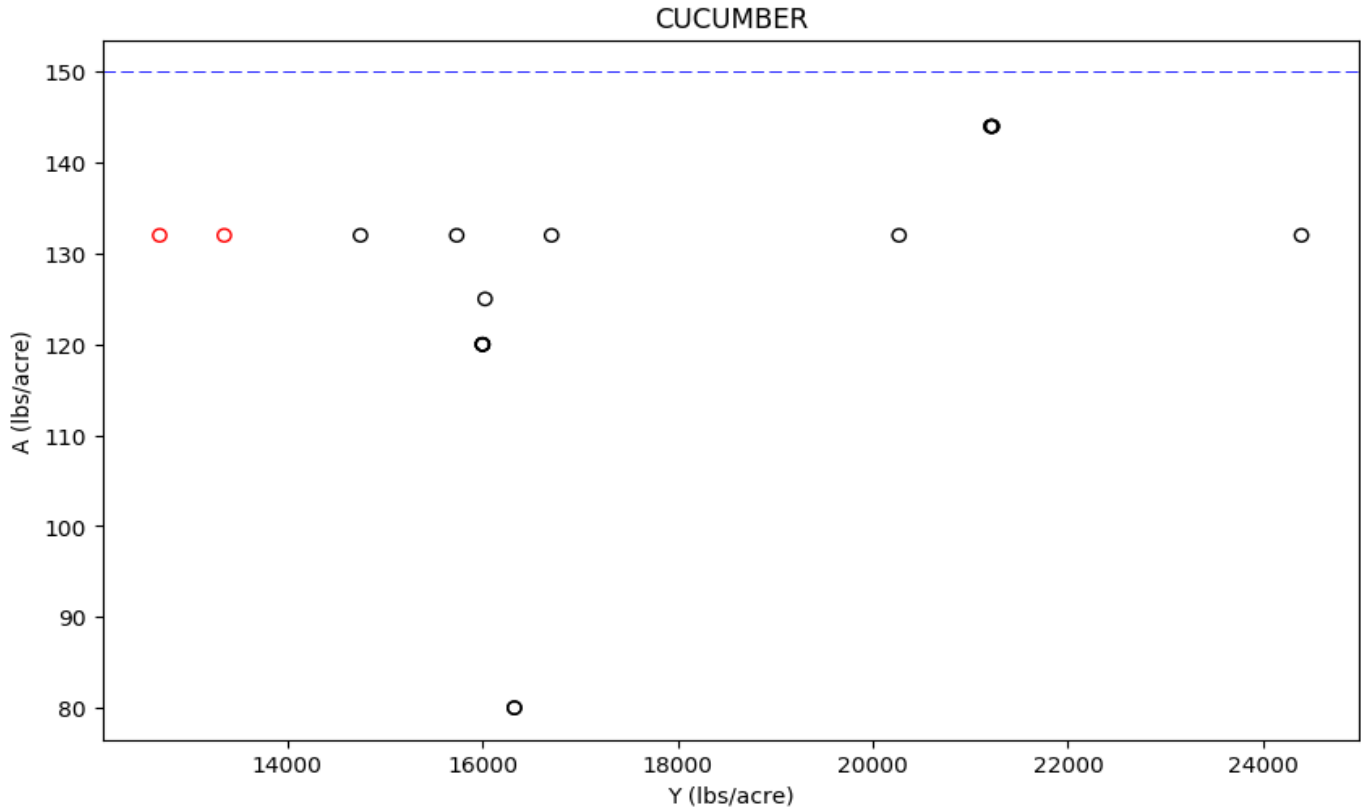
**Table VIII-3. A-R Summary Statistics for CUCUMBER management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
19	62.39	116.0	91.89	102.72	107.69	115.82	115.99	4

**Figure VIII-2. Scatter plot of A vs. Y for CUCUMBER with all T-R together.**

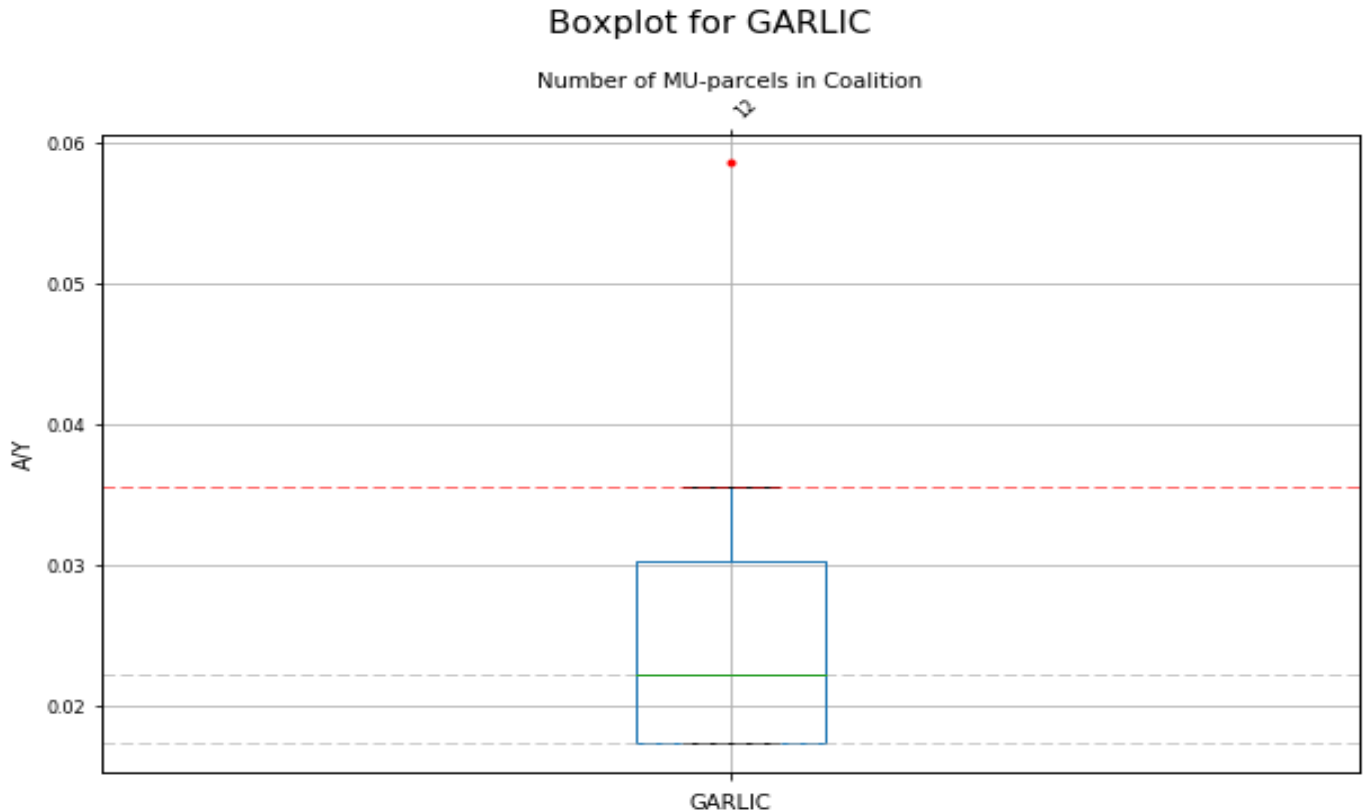
Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# IX. GARLIC

**Figure IX-1. Box and Whisker plots of A/Y for GARLIC management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table IX-1. A/Y Summary Statistics for GARLIC management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
12	0.0174	0.0585	0.0174	0.0174	0.0222	0.0303	0.0355	1

**Table IX-2. A/R Summary Statistics for GARLIC management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
12	2.298	7.7471	2.298	2.298	2.9383	4.0187	4.6966	1

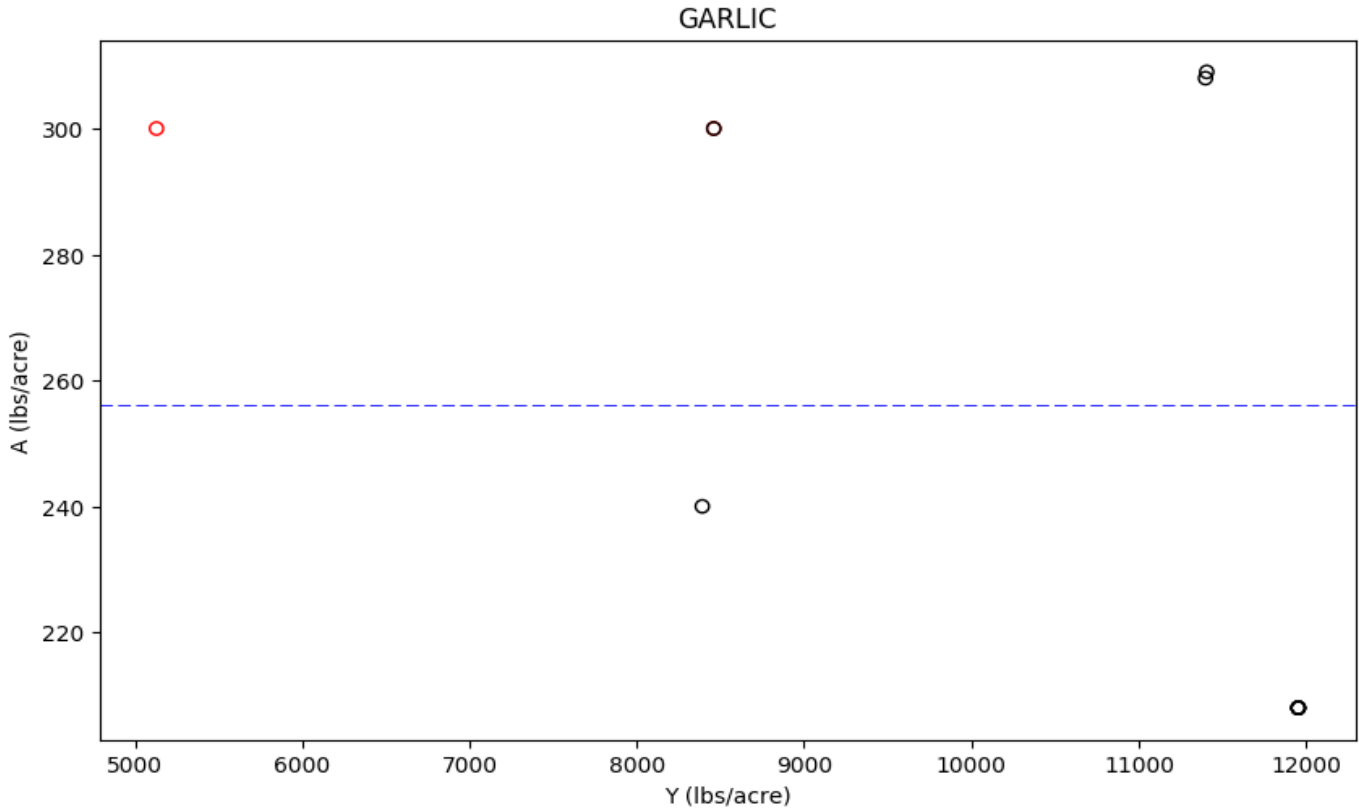
**Table IX-3. A-R Summary Statistics for GARLIC management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
12	117.49	260.66	117.49	117.49	147.1	216.75	234.42	2

**Figure IX-2. Scatter plot of A vs. Y for GARLIC with all T-R together.**

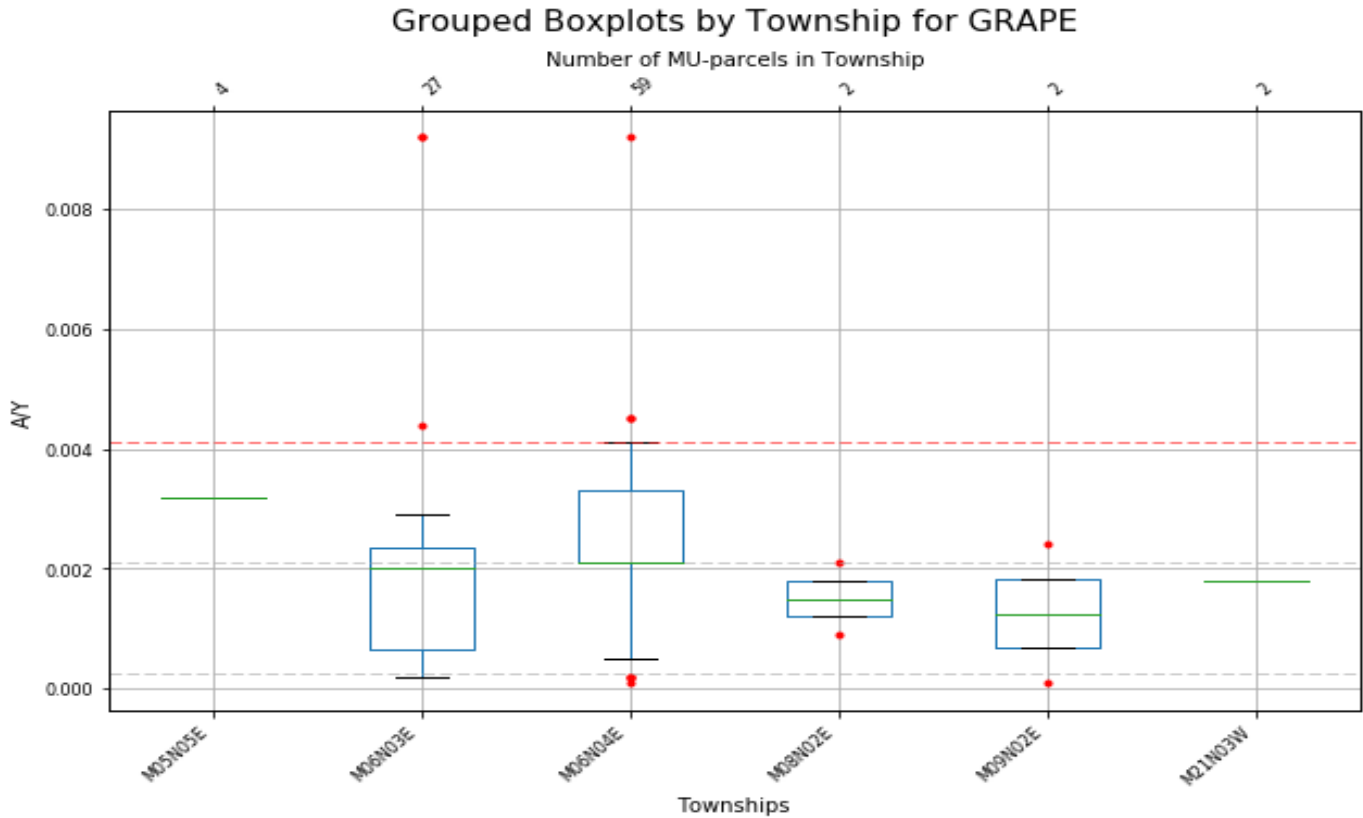
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# X. GRAPE

**Figure X-1. Box and Whisker plots of A/Y for GRAPE management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table X-1. A/Y Summary Statistics for GRAPE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N05E	4	0.0032	0.0032	0.0032	0.0032	0.0032	0.0032	0.0032	0
06N03E	27	0.0002	0.0092	0.0002	0.0006	0.002	0.0024	0.0035	3
06N04E	59	0.0001	0.0092	0.0005	0.0021	0.0021	0.0033	0.0041	7
08N02E	2	0.0009	0.0021	0.001	0.0012	0.0015	0.0018	0.002	2
09N02E	2	0.0001	0.0024	0.0003	0.0007	0.0012	0.0018	0.0022	2
21N03W	2	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0

**Table X-2. A/R Summary Statistics for GRAPE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N05E	4	1.8028	1.8028	1.8028	1.8028	1.8028	1.8028	1.8028	0
06N03E	27	0.1	5.1019	0.1	0.3584	1.0833	1.2986	1.9444	3
06N04E	59	0.0611	5.1019	0.2722	1.1528	1.1528	1.8402	2.25	10
08N02E	2	0.5185	1.1574	0.5824	0.6782	0.838	0.9977	1.0935	2
09N02E	2	0.0353	1.3222	0.164	0.357	0.6788	1.0005	1.1935	2

**Table X-3. A-R Summary Statistics for GRAPE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

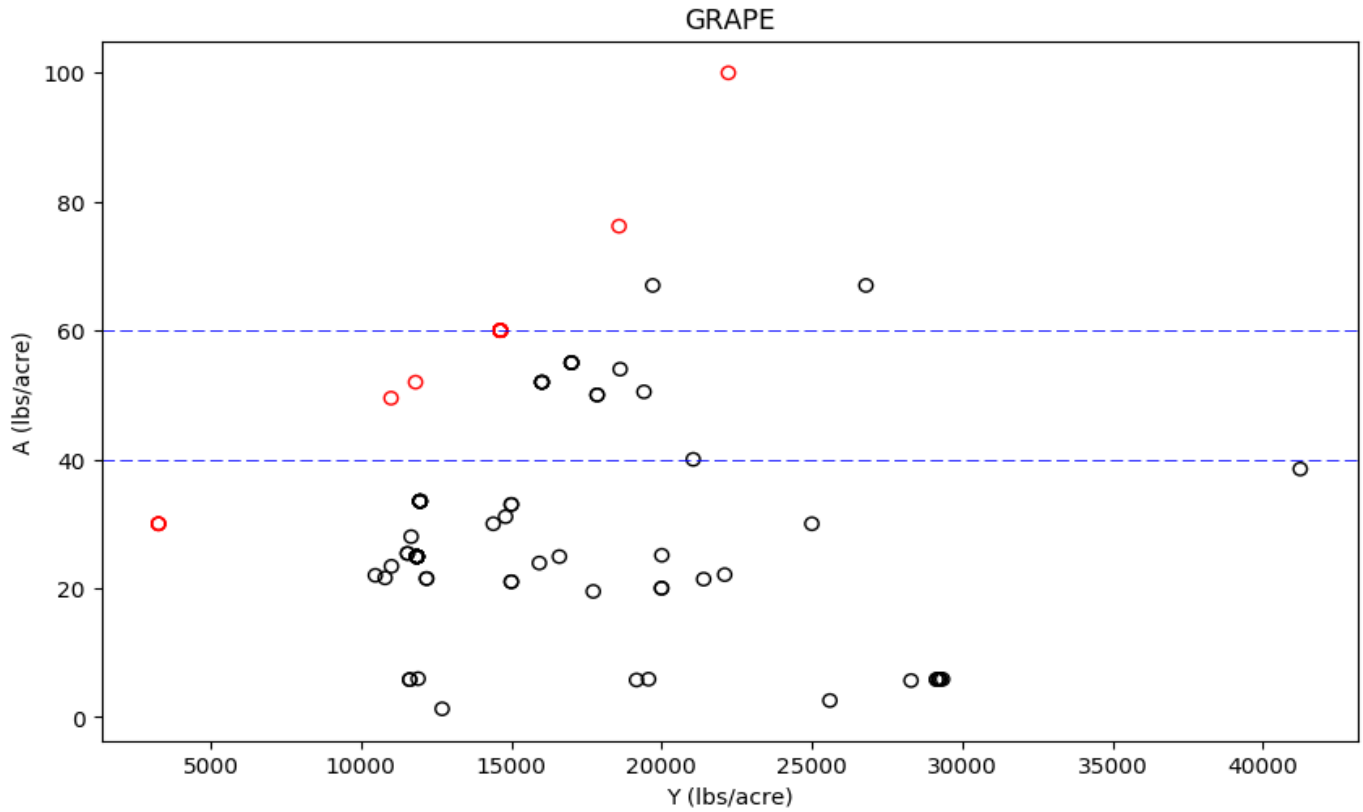
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N05E	4	23.15	23.15	23.15	23.15	23.15	23.15	23.15	0
06N03E	27	-52.65	30.72	-52.65	-22.97	1.66	11.81	21.94	3
06N04E	59	-46.64	60.0	-17.07	3.3	3.3	24.4	33.33	8
08N02E	2	-69.5	4.08	-62.14	-51.1	-32.71	-14.32	-3.28	2
09N02E	2	-34.73	6.82	-30.57	-24.34	-13.95	-3.56	2.67	2

**Table X-4. Summary Statistics for GRAPE management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	96	0.0001	0.0092	0.0002	0.0014	0.0021	0.0032	0.0041	16
A/R	96	0.0353	5.1019	0.1272	0.7778	1.162	1.7972	2.25	17
A-R	96	-69.5	60.0	-37.95	-6.01	3.44	23.15	33.33	12

**Figure X-2. Scatter plot of A vs. Y for GRAPE with all T-R together.**

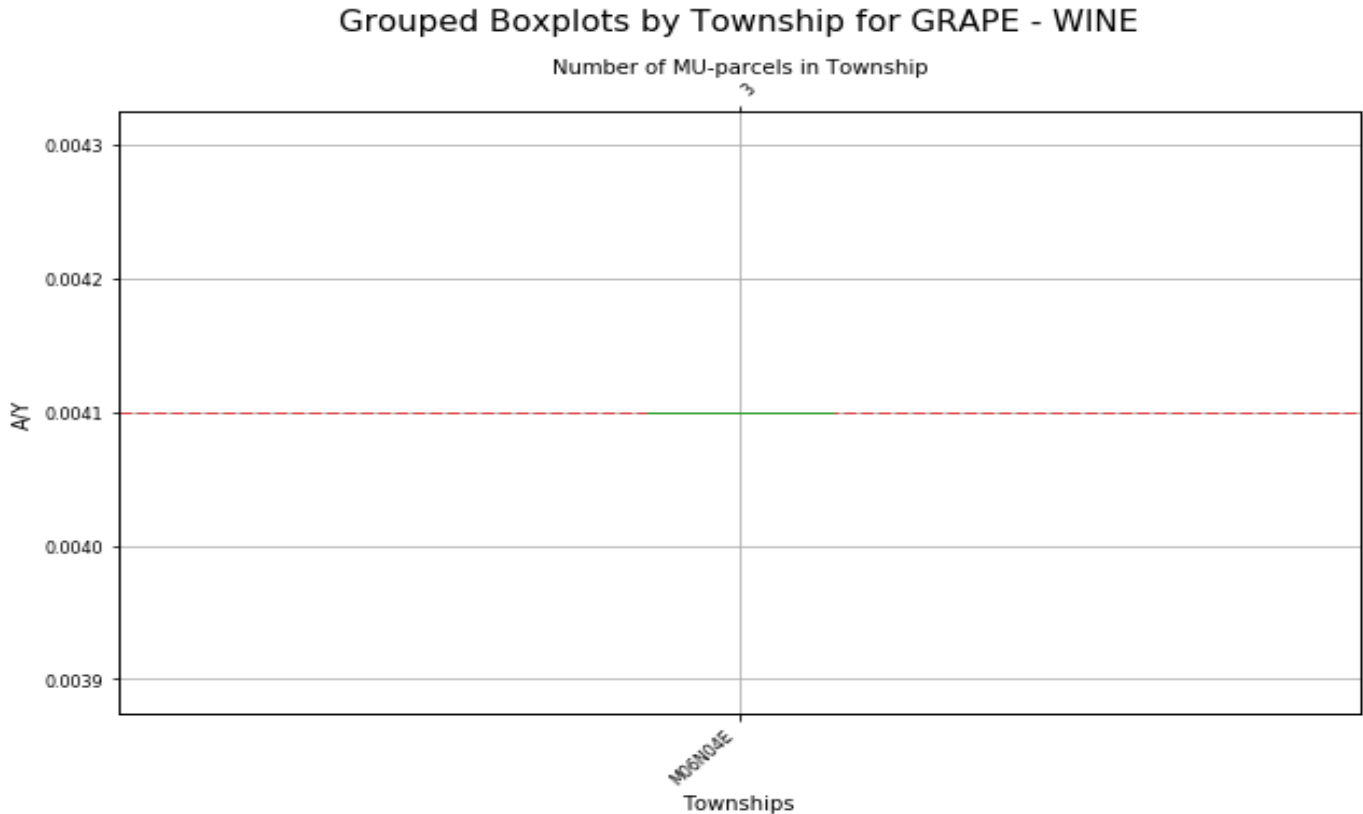
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XI. GRAPE - WINE

**Figure XI-1. Box and Whisker plots of A/Y for GRAPE - WINE management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XI-1. A/Y Summary Statistics for GRAPE - WINE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
06N04E	3	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0.0041	0

**Table XI-2. A/R Summary Statistics for GRAPE - WINE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
06N04E	3	33.33	33.33	33.33	33.33	33.33	33.33	33.33	0

**Table XI-3. A-R Summary Statistics for GRAPE - WINE management units grouped by T-R.**

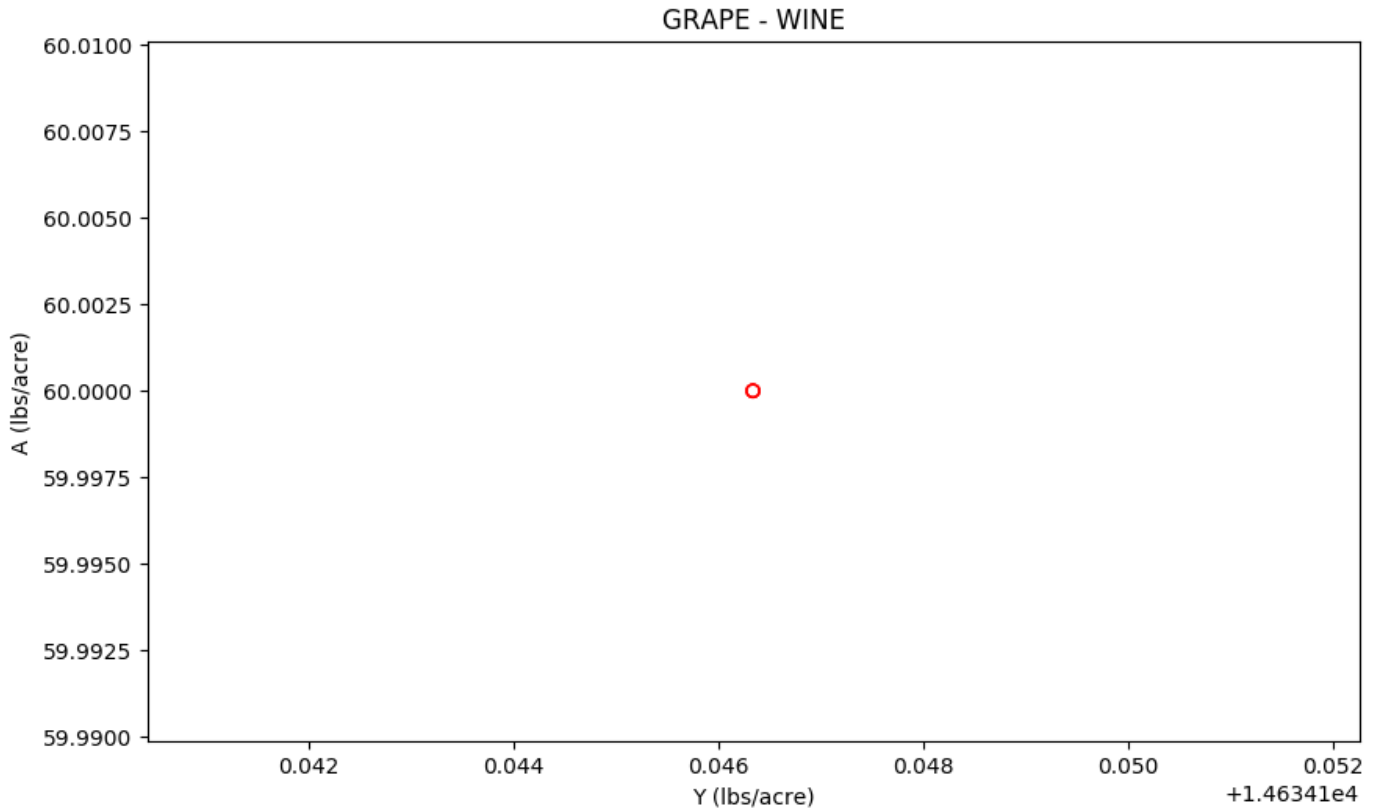
For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
06N04E	3	33.33	33.33	33.33	33.33	33.33	33.33	33.33	0



**Figure XI-2. Scatter plot of A vs. Y for GRAPE - WINE with all T-R together.**

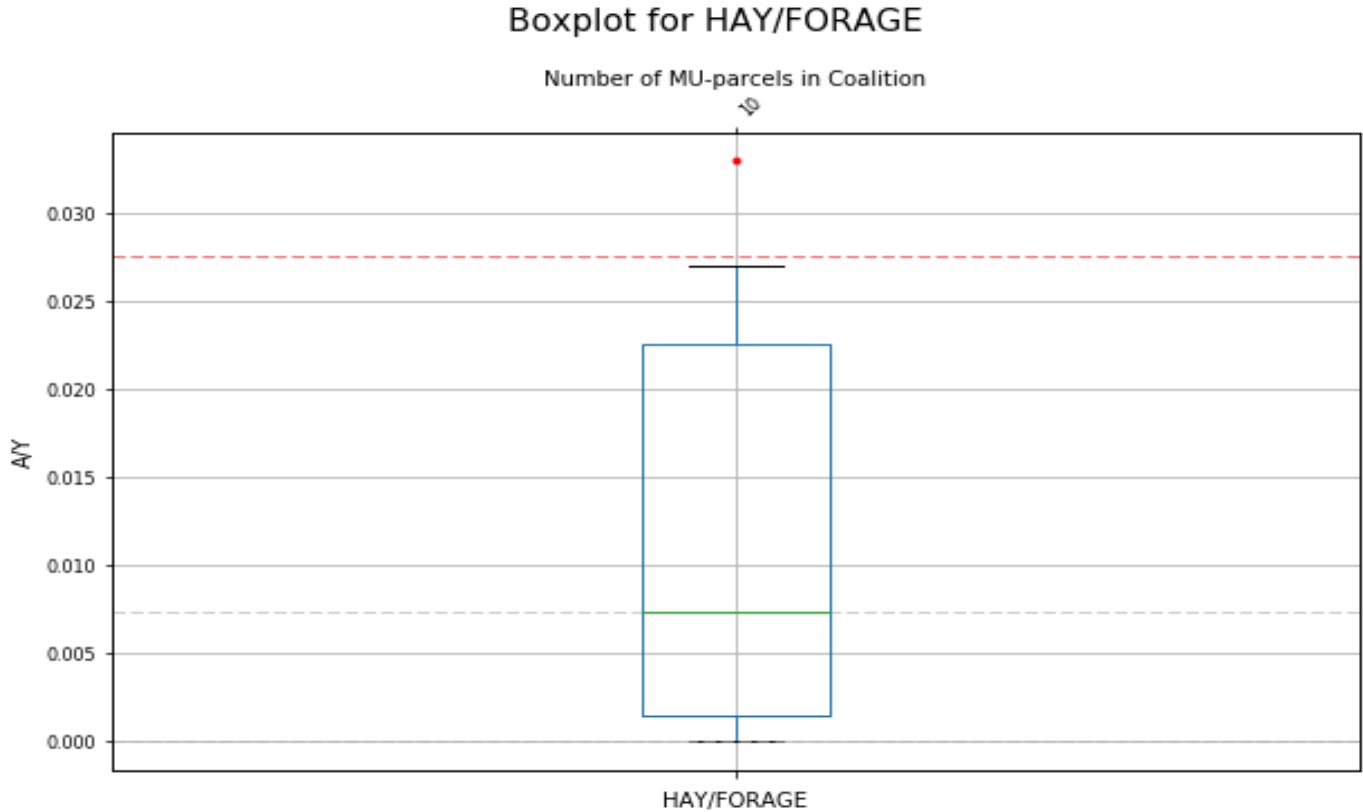
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



## XII. HAY/FORAGE

**Figure XII-1. Box and Whisker plots of A/Y for HAY/FORAGE management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



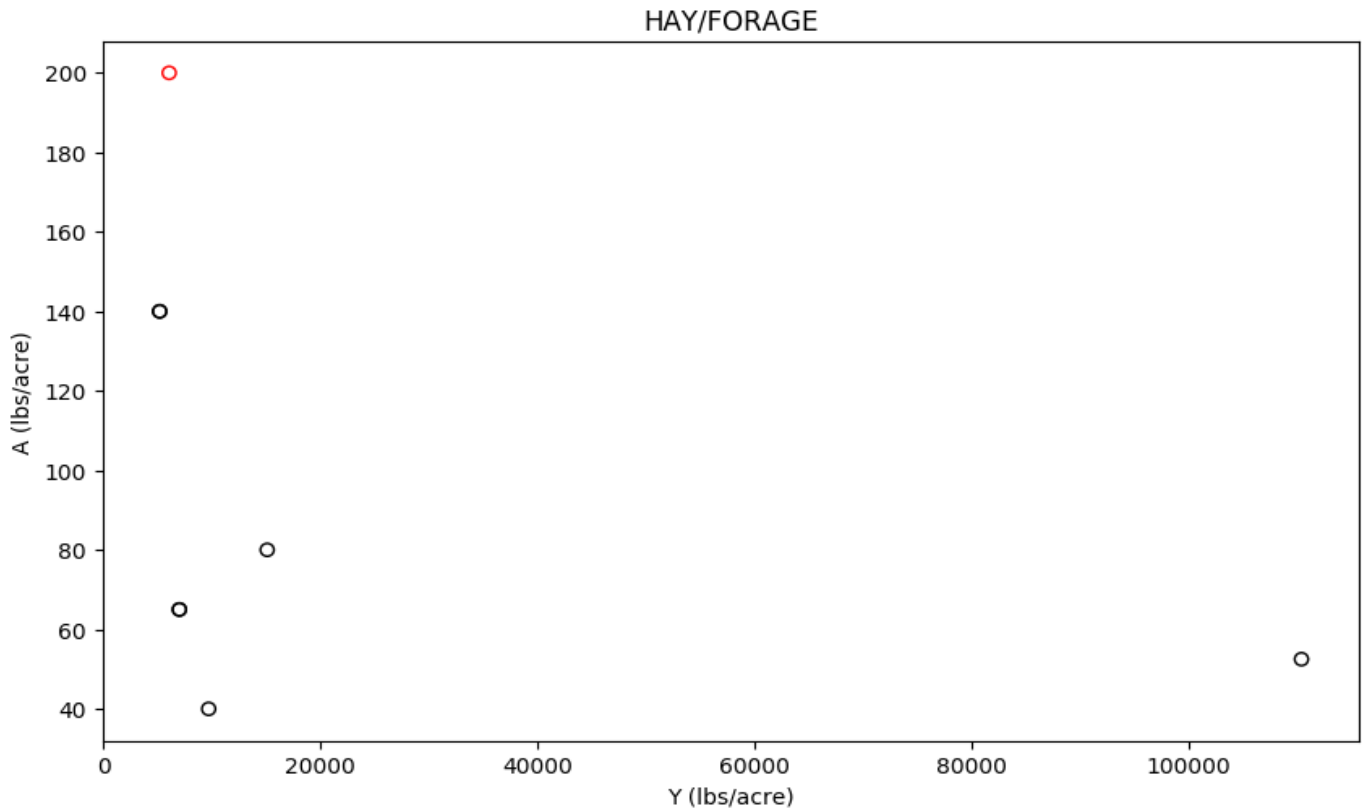
**Table XII-1. A/Y Summary Statistics for HAY/FORAGE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
10	0.0	0.033	0.0	0.0014	0.0073	0.0226	0.0276	1

**Figure XII-2. Scatter plot of A vs. Y for HAY/FORAGE with all T-R together.**

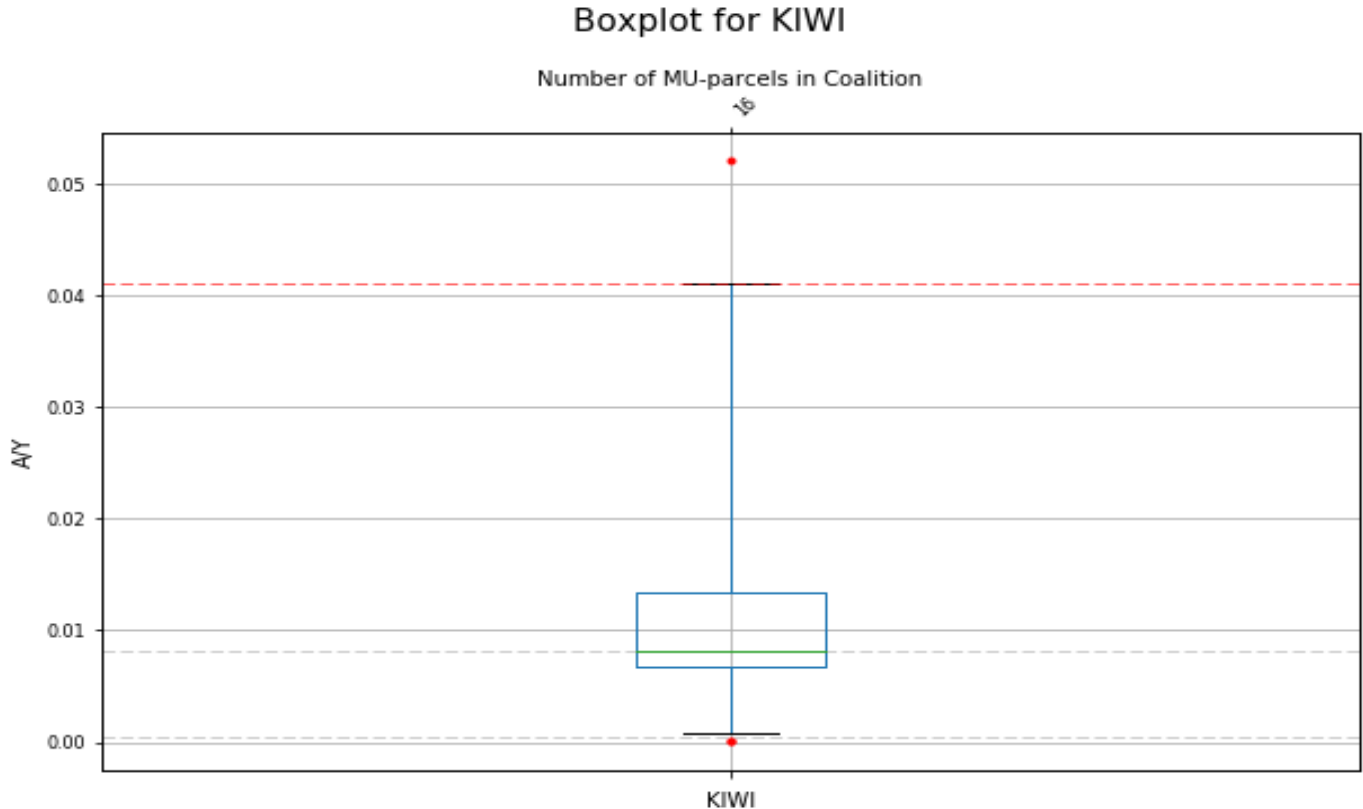
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XIII. KIWI

**Figure XIII-1. Box and Whisker plots of A/Y for KIWI management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



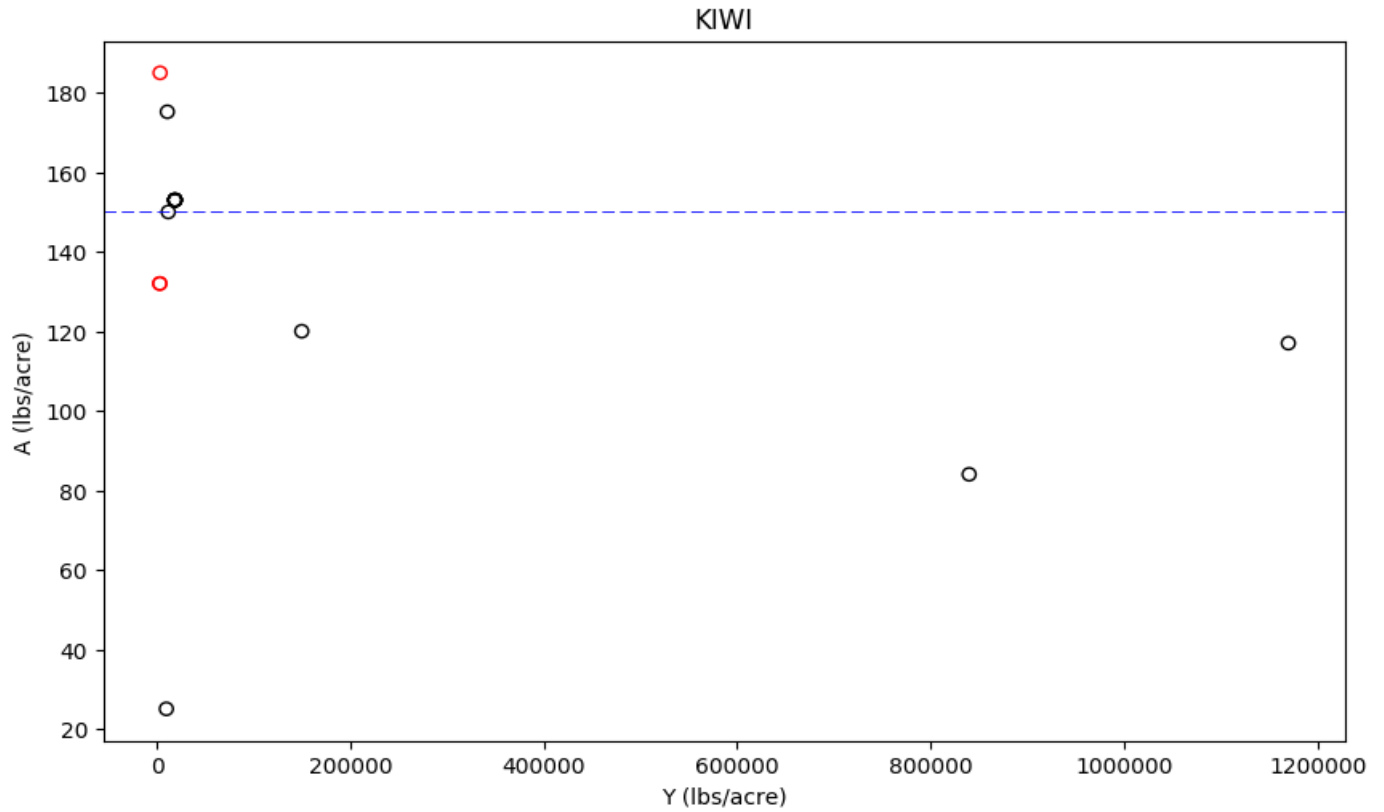
**Table XIII-1. A/Y Summary Statistics for KIWI management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
16	0.0001	0.052	0.0004	0.0067	0.0081	0.0134	0.041	3

**Figure XIII-2. Scatter plot of A vs. Y for KIWI with all T-R together.**

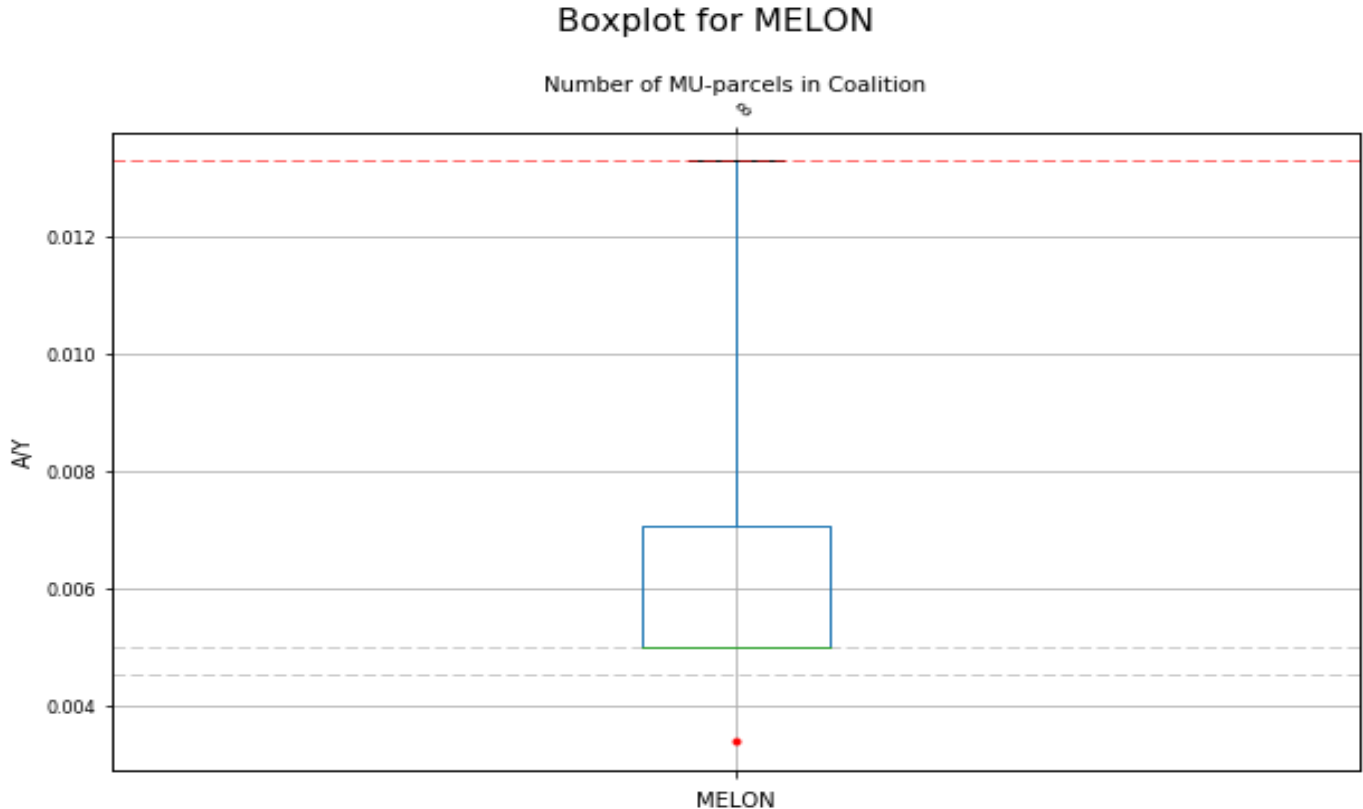
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XIV. MELON

**Figure XIV-1. Box and Whisker plots of A/Y for MELON management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XIV-1. A/Y Summary Statistics for MELON management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
8	0.0034	0.0133	0.0045	0.005	0.005	0.0071	0.0133	1

**Table XIV-2. A/R Summary Statistics for MELON management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
3	2.2635	9.009	3.6126	5.6363	9.009	9.009	9.009	1

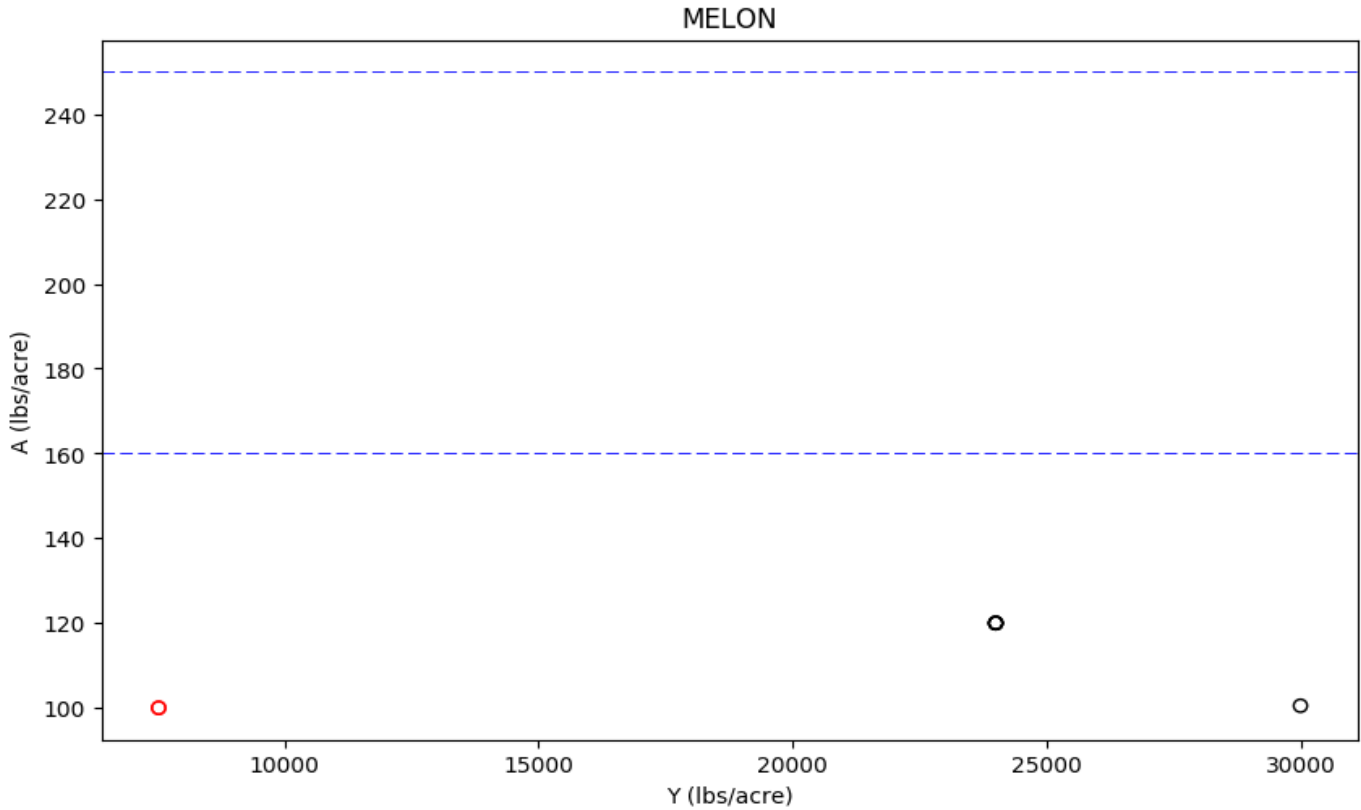
**Table XIV-3. A-R Summary Statistics for MELON management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
3	56.1	88.9	62.66	72.5	88.9	88.9	88.9	1

**Figure XIV-2. Scatter plot of A vs. Y for MELON with all T-R together.**

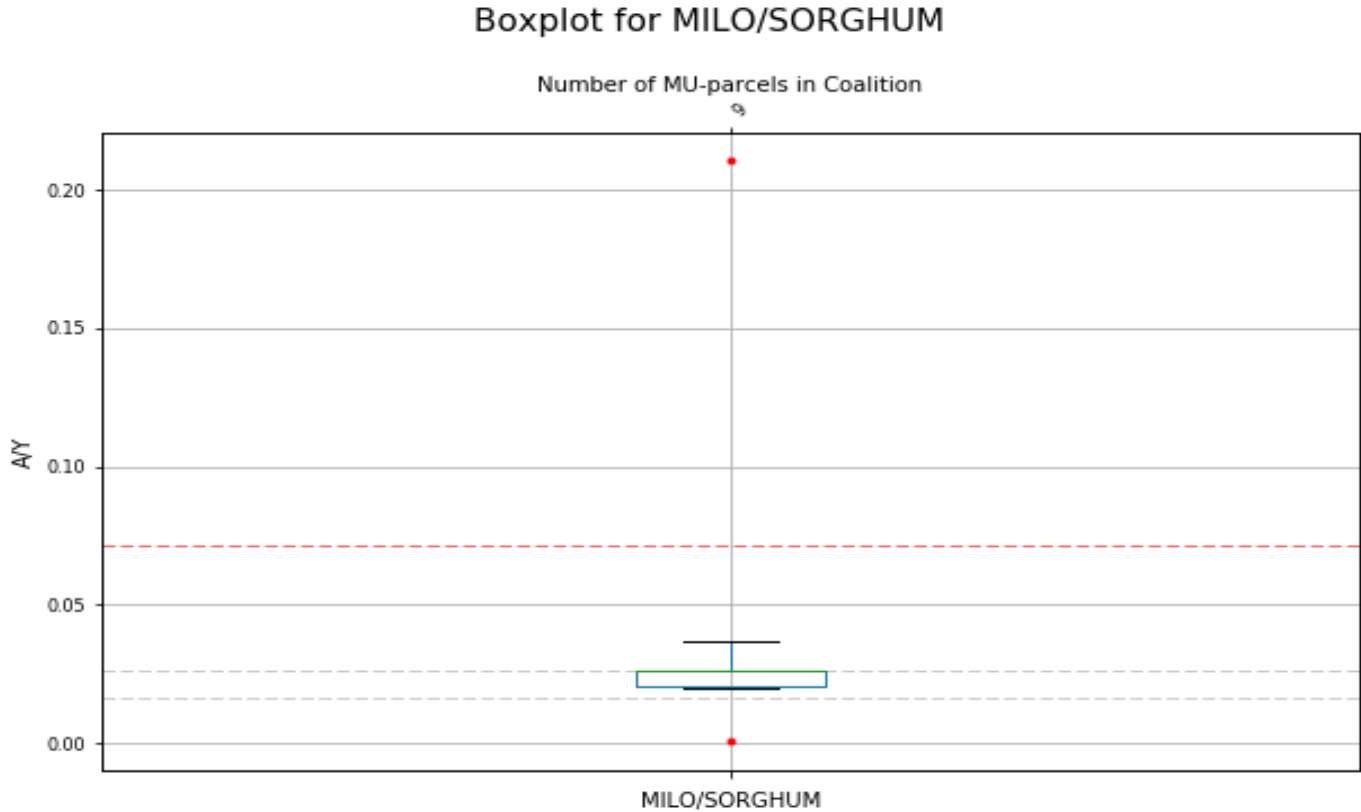
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XV. MILO/SORGHUM

**Figure XV-1. Box and Whisker plots of A/Y for MILO/SORGHUM management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XV-1. A/Y Summary Statistics for MILO/SORGHUM management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
9	0.001	0.21	0.0162	0.0205	0.0267	0.0267	0.0715	2

**Table XV-2. A/R Summary Statistics for MILO/SORGHUM management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
9	0.0585	12.7273	0.9814	1.2424	1.615	1.615	4.3343	2



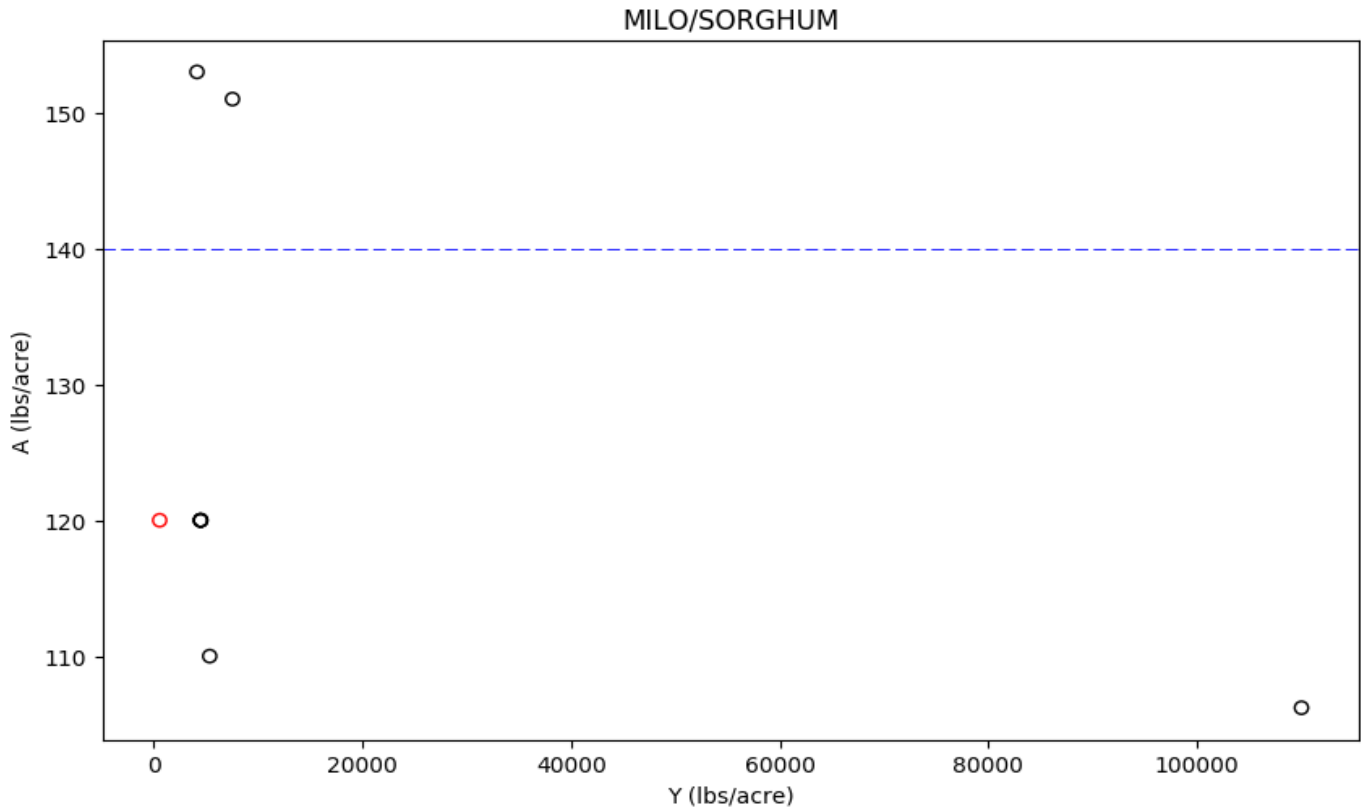
**Table XV-3. A-R Summary Statistics for MILO/SORGHUM management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
9	-1708.8	110.57	-324.59	26.42	45.7	45.7	89.79	2

**Figure XV-2. Scatter plot of A vs. Y for MILO/SORGHUM with all T-R together.**

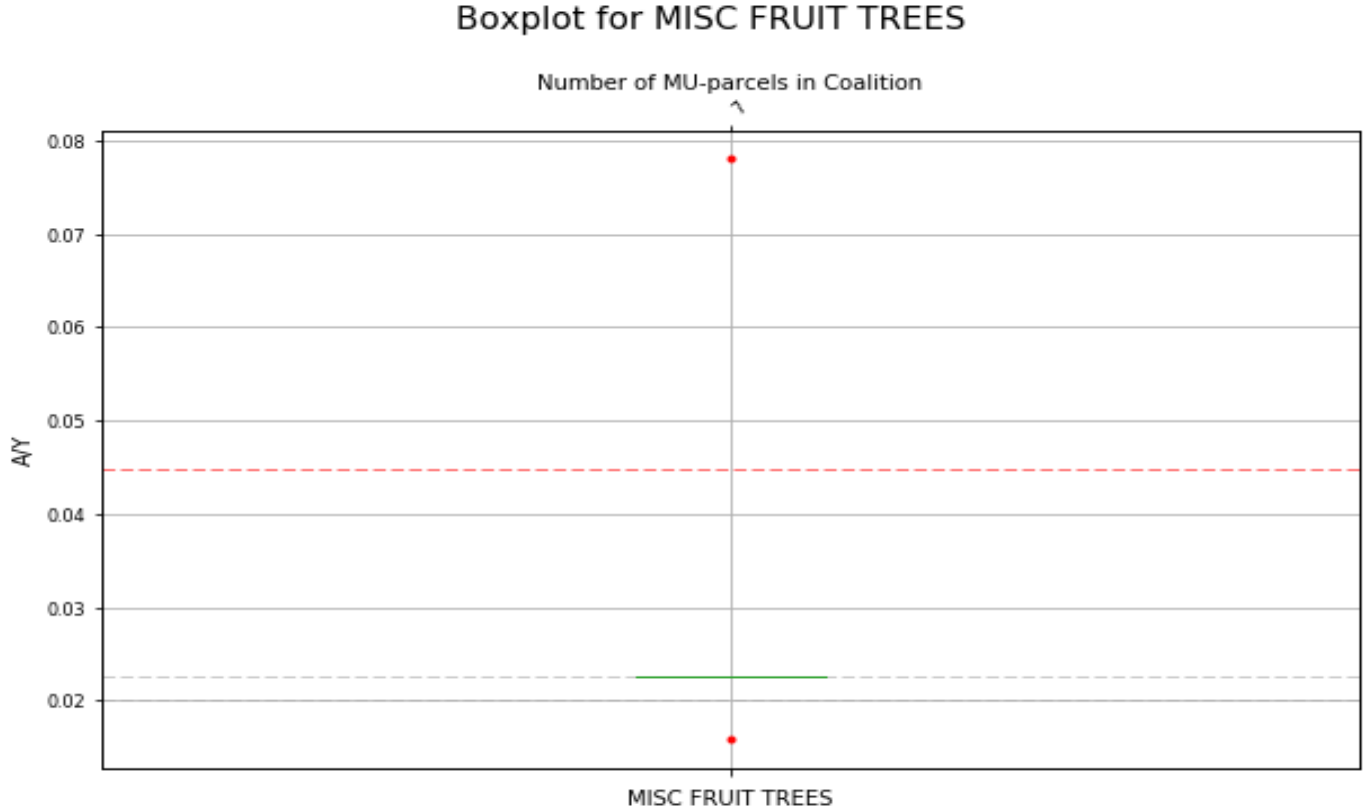
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XVI. MISC FRUIT TREES

**Figure XVI-1. Box and Whisker plots of A/Y for MISC FRUIT TREES management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



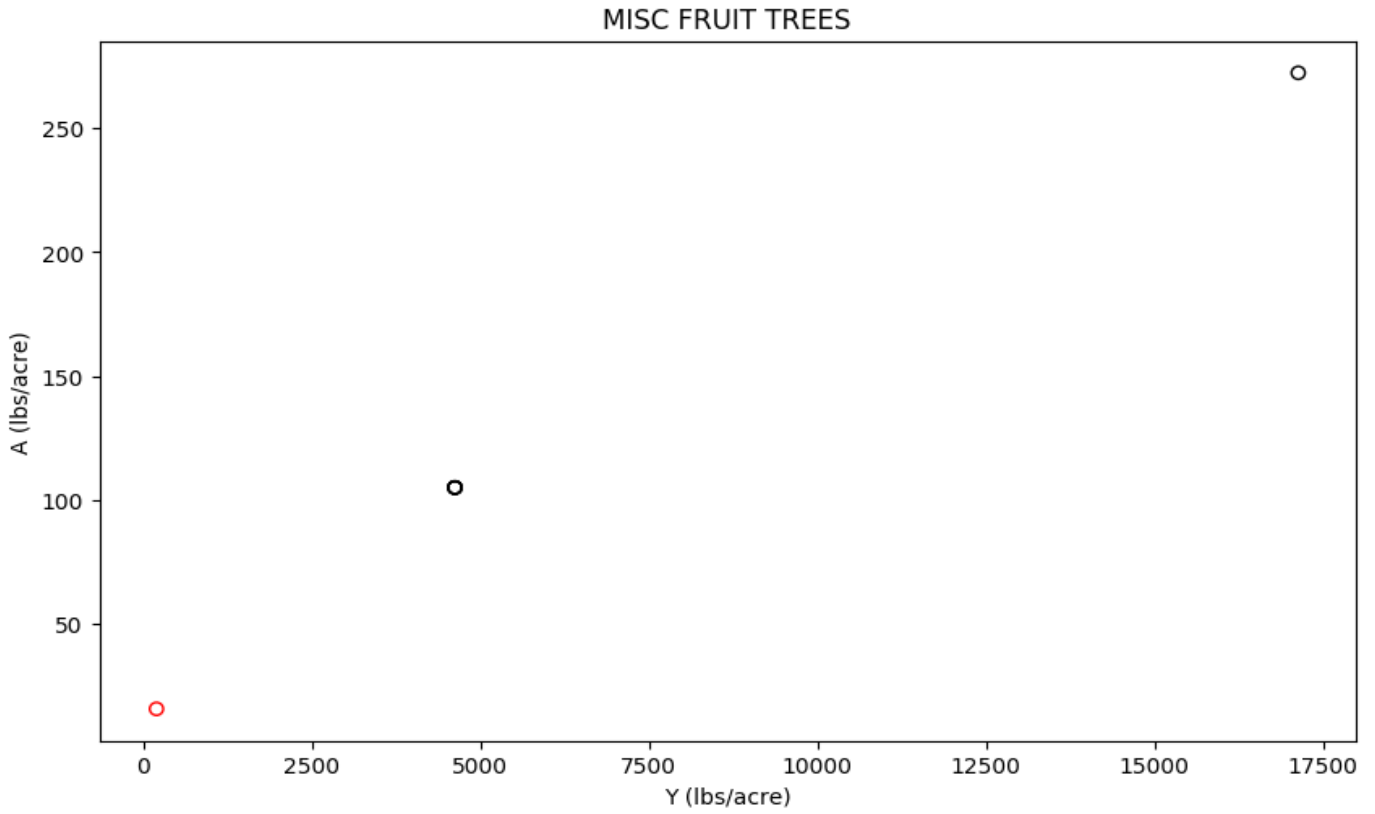
**Table XVI-1. A/Y Summary Statistics for MISC FRUIT TREES management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
7	0.0159	0.078	0.02	0.0227	0.0227	0.0227	0.0448	2

**Figure XVI-2. Scatter plot of A vs. Y for MISC FRUIT TREES with all T-R together.**

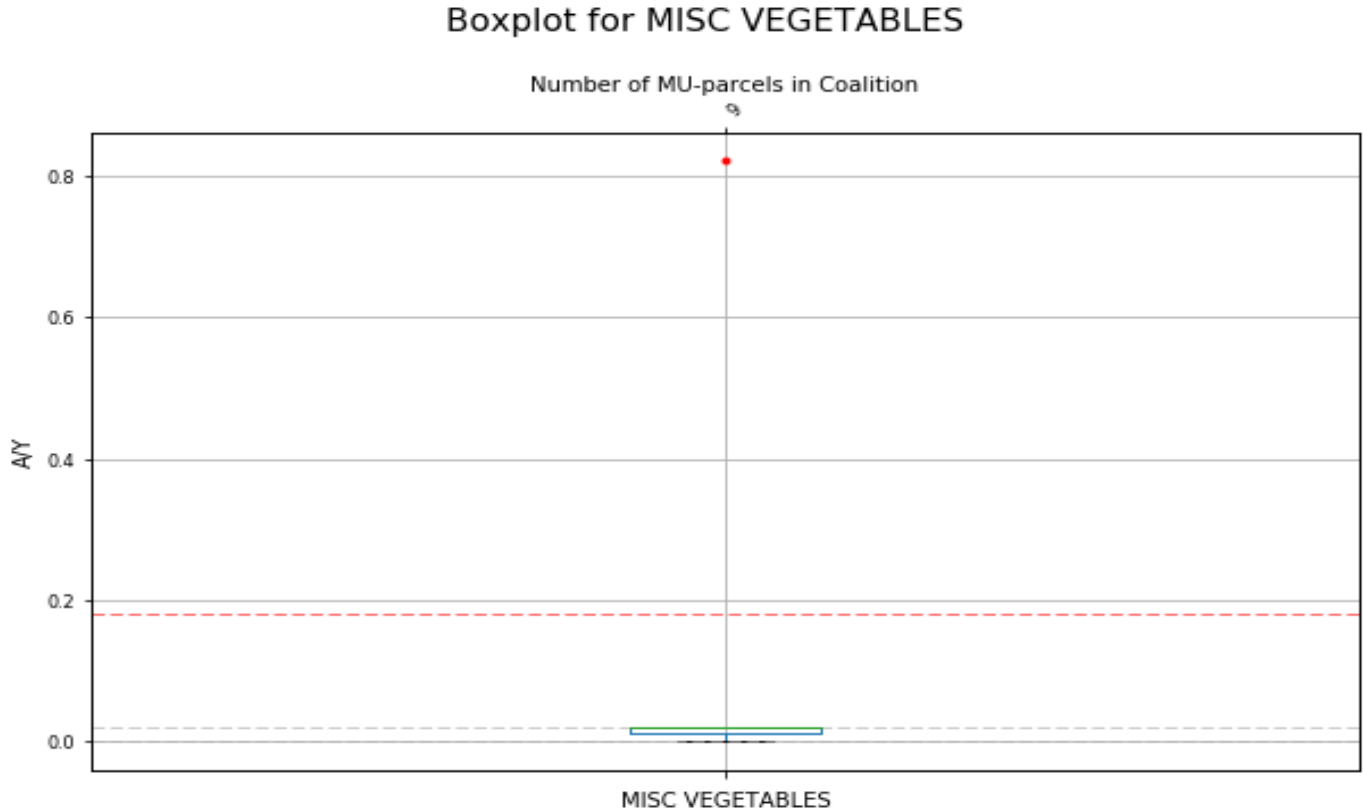
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XVII. MISC VEGETABLES

**Figure XVII-1. Box and Whisker plots of A/Y for MISC VEGETABLES management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



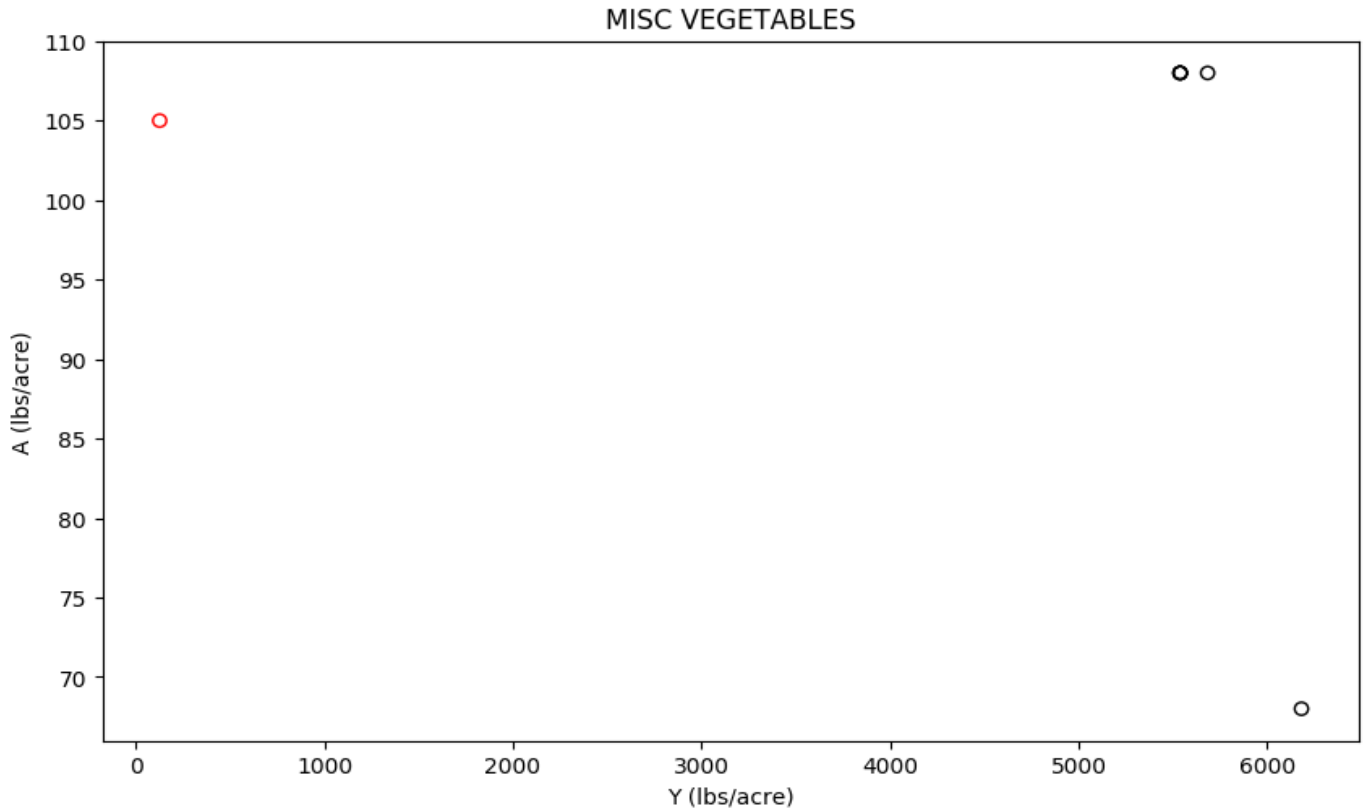
**Table XVII-1. A/Y Summary Statistics for MISC VEGETABLES management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
9	0.0	0.8218	0.0	0.011	0.0195	0.0195	0.18	1

**Figure XVII-2. Scatter plot of A vs. Y for MISC VEGETABLES with all T-R together.**

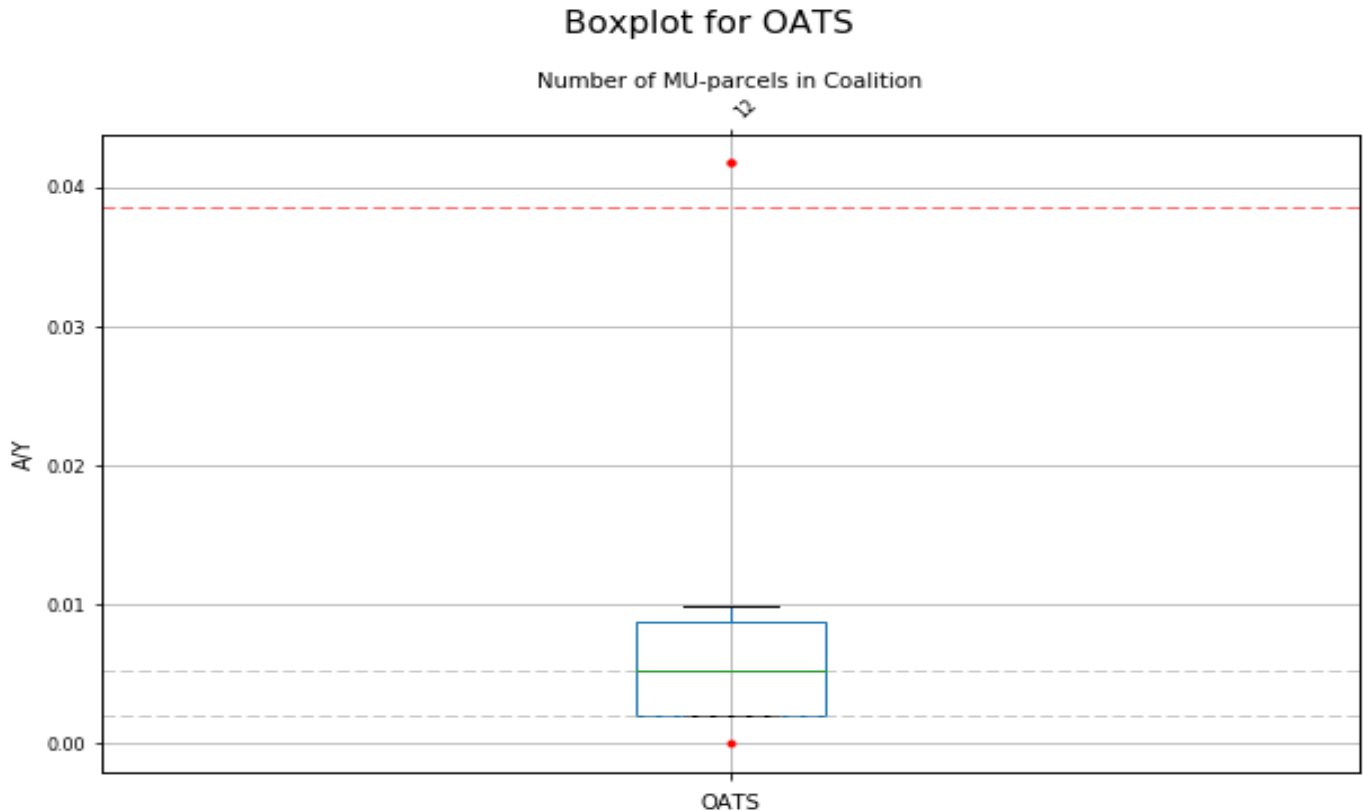
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XVIII. OATS

**Figure XVIII-1. Box and Whisker plots of A/Y for OATS management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XVIII-1. A/Y Summary Statistics for OATS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
12	0.0	0.0417	0.002	0.002	0.0052	0.0088	0.0385	3

**Table XVIII-2. A/R Summary Statistics for OATS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
12	0.0	2.2103	0.1061	0.1061	0.2761	0.4666	2.042	3

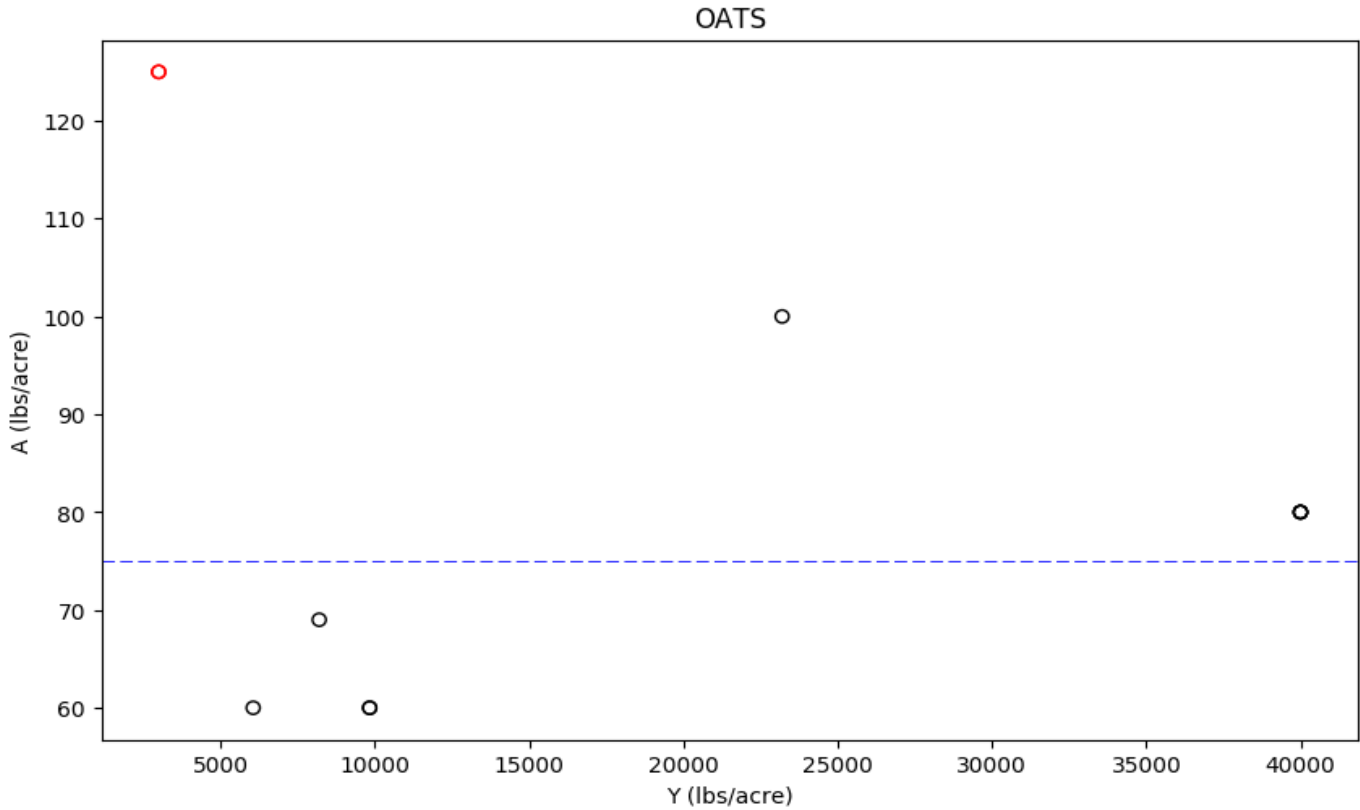
**Table XVIII-3. A-R Summary Statistics for OATS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
12	-674.0	68.45	-674.0	-674.0	-125.41	-70.01	56.22	2

**Figure XVIII-2. Scatter plot of A vs. Y for OATS with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.

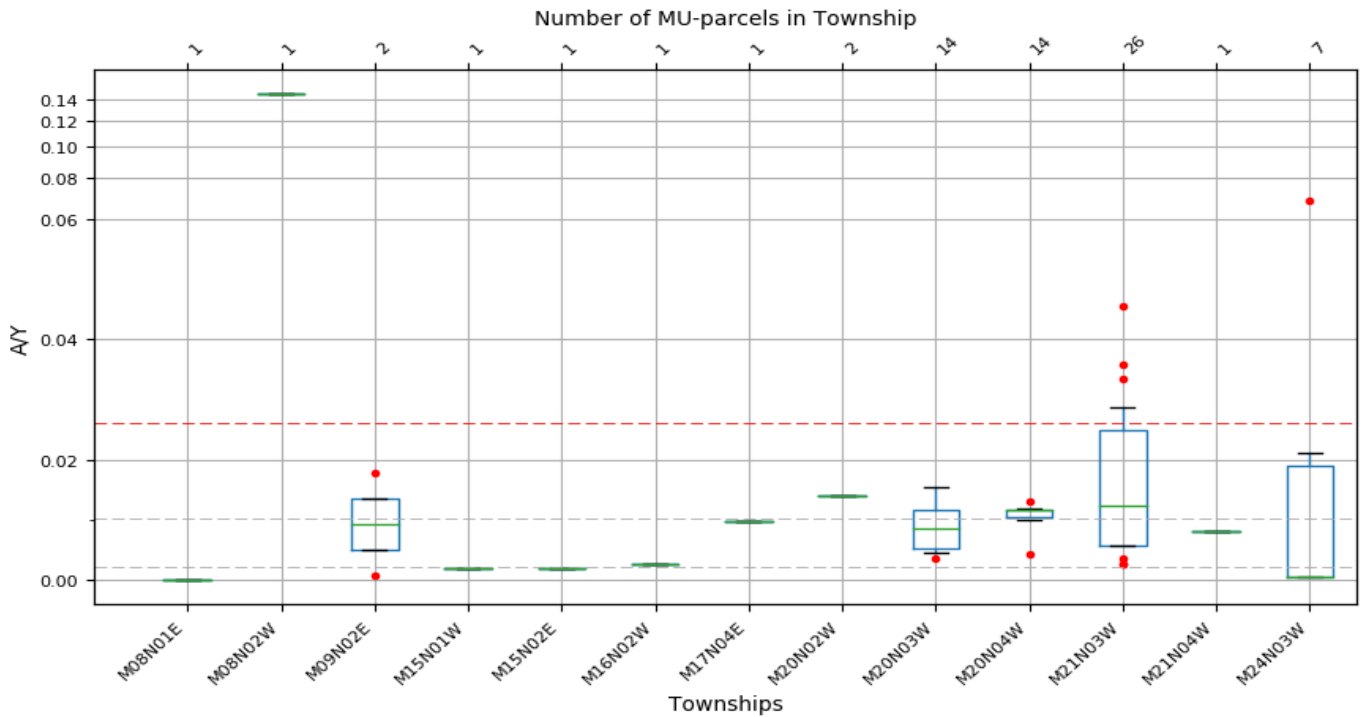


# XIX. OLIVE

**Figure XIX-1. Box and Whisker plots of A/Y for OLIVE management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers ( $A/Y > 90\%$  percentile or  $< 10\%$  percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.

**Grouped Boxplots by Township for OLIVE**





**Table XIX-1. A/Y Summary Statistics for OLIVE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
08N01E	1	0.0	0.0						
08N02W	1	0.1455	0.1455						
09N02E	2	0.0007	0.0178	0.0024	0.005	0.0092	0.0135	0.0161	2
15N01W	1	0.002	0.002						
15N02E	1	0.002	0.002						
16N02W	1	0.0026	0.0026						
17N04E	1	0.0097	0.0097						
20N02W	2	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0
20N03W	14	0.0036	0.0155	0.0046	0.0054	0.0086	0.0117	0.0155	1
20N04W	14	0.0043	0.013	0.01	0.0104	0.0116	0.0118	0.0118	2
21N03W	26	0.0026	0.0455	0.0046	0.0057	0.0122	0.0249	0.031	6
21N04W	1	0.0082	0.0082						
24N03W	7	0.0005	0.0686	0.0005	0.0005	0.0005	0.019	0.04	1

**Table XIX-2. A/R Summary Statistics for OLIVE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
08N01E	1	0.0	0.0						
08N02W	1	46.3231	46.3231						
09N02E	2	0.0382	0.9432	0.1287	0.2644	0.4907	0.717	0.8527	2
15N01W	1	0.6369	0.6369						
15N02E	1	0.637	0.637						
16N02W	1	0.828	0.828						
17N04E	1	3.081	3.081						
20N02W	2	4.4586	4.4586	4.4586	4.4586	4.4586	4.4586	4.4586	0
20N03W	14	1.1561	4.9252	1.4786	1.7172	2.7384	3.7126	4.9252	1
20N04W	14	1.3758	4.154	3.1736	3.3062	3.7038	3.7468	3.7611	2
21N03W	26	0.8248	14.4904	1.4779	1.8252	3.8976	7.9206	9.8633	6
21N04W	1	2.6067	2.6067						
24N03W	7	0.1736	21.8471	0.1736	0.1736	0.1736	6.051	12.7516	1

**Table XIX-3. A-R Summary Statistics for OLIVE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

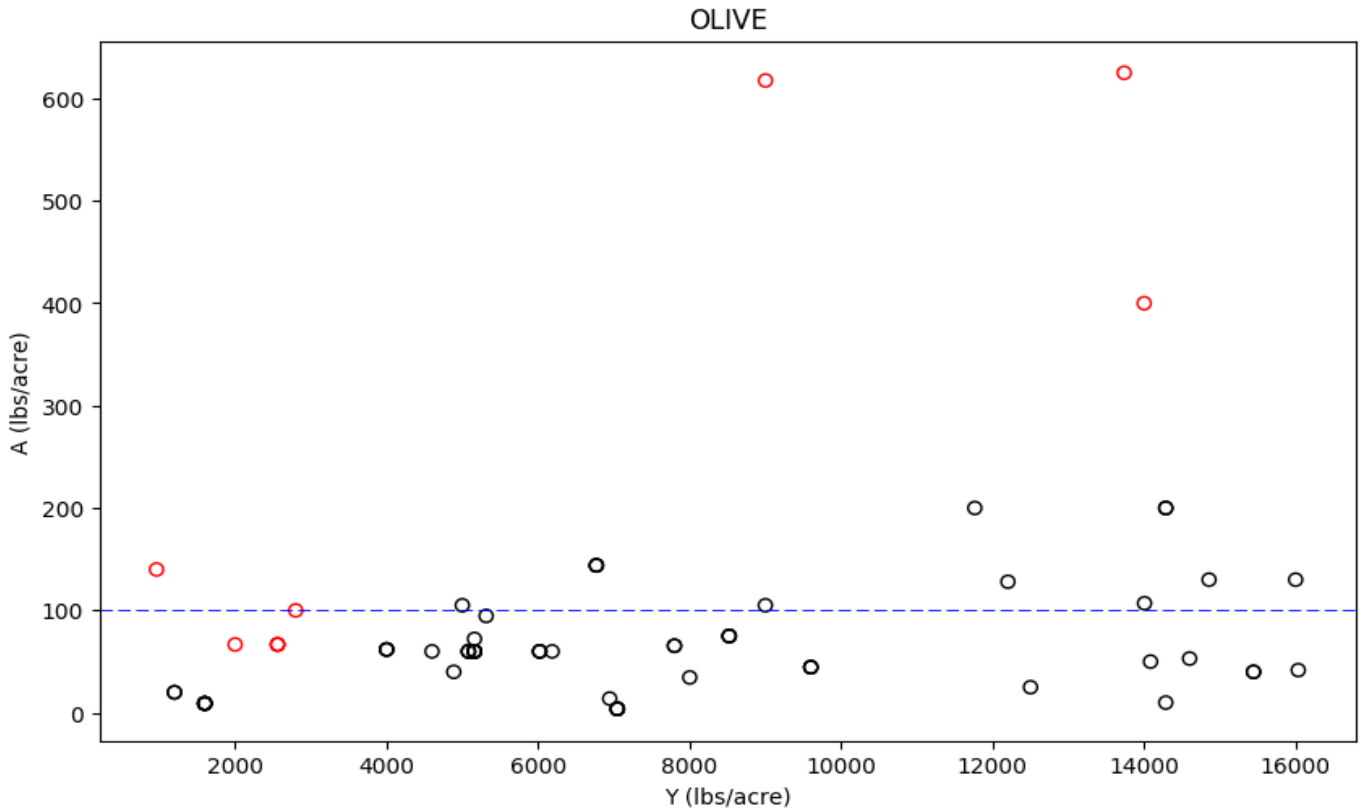
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
08N01E	1	-18.84	-18.84						
08N02W	1	136.55	136.55						
09N02E	2	-251.81	-5.69	-227.19	-190.28	-128.75	-67.22	-30.3	2
15N01W	1	-14.0	-14.0						
15N02E	1	-7.91	-7.91						
16N02W	1	-8.31	-8.31						
17N04E	1	40.5	40.5						
20N02W	2	155.0	155.0	155.0	155.0	155.0	155.0	155.0	0
20N03W	14	7.0	77.0	14.57	21.3	46.0	48.86	58.76	3
20N04W	14	9.57	46.0	41.0	41.75	44.0	44.0	44.0	2
21N03W	26	-8.0	582.0	4.17	4.17	57.46	88.25	123.0	4
21N04W	1	25.0	25.0						
24N03W	7	-18.28	589.24	-18.28	-18.28	-18.28	126.18	333.53	1

**Table XIX-4. Summary Statistics for OLIVE management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	72	0.0	0.1455	0.0021	0.0057	0.0102	0.0155	0.0261	14
A/R	72	0.0	46.3231	0.6558	1.7386	3.1736	4.9252	8.3025	14
A-R	72	-251.81	589.24	-8.28	5.54	44.0	59.24	123.0	15

**Figure XIX-2. Scatter plot of A vs. Y for OLIVE with all T-R together.**

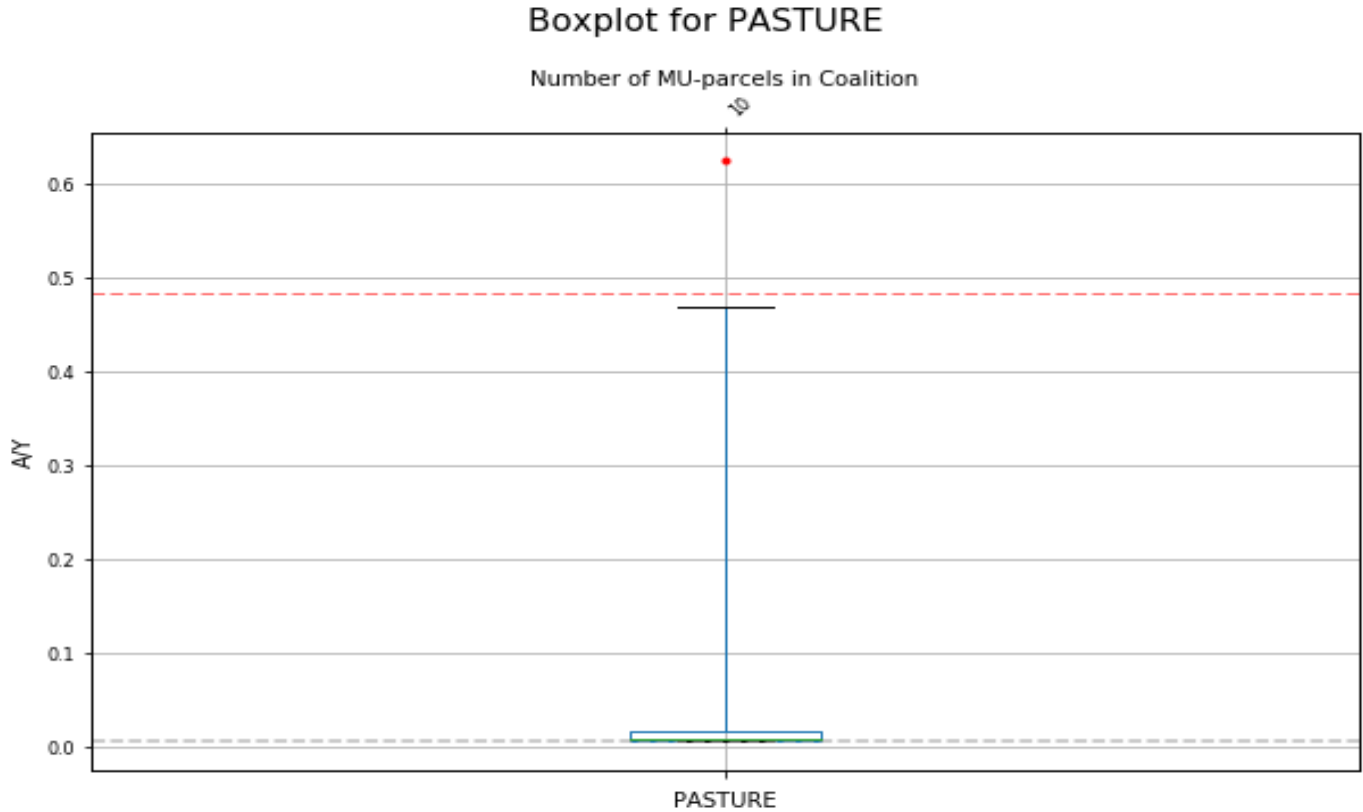
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XX. PASTURE

**Figure XX-1. Box and Whisker plots of A/Y for PASTURE management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



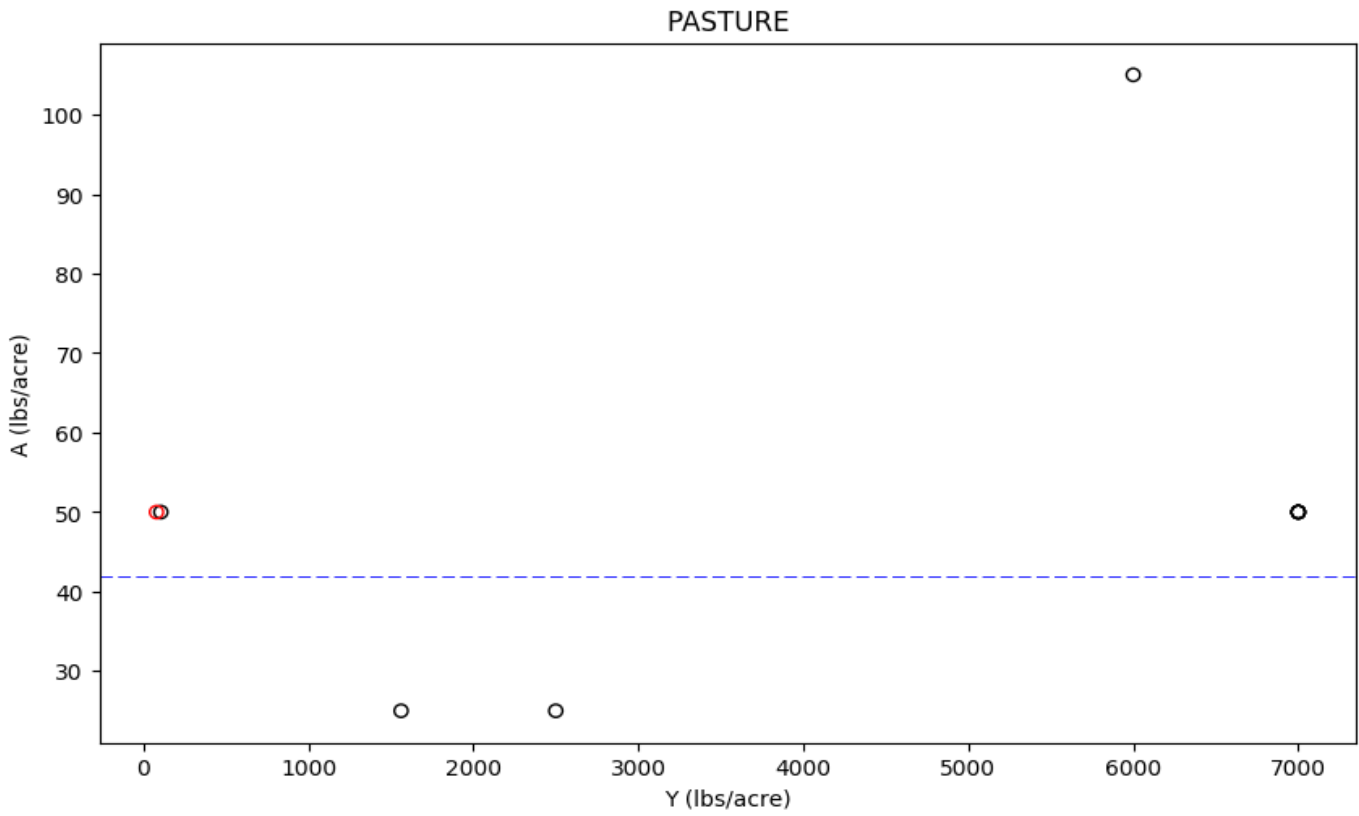
**Table XX-1. A/Y Summary Statistics for PASTURE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
10	0.0071	0.625	0.0071	0.0071	0.0086	0.0171	0.4844	1

**Figure XX-2. Scatter plot of A vs. Y for PASTURE with all T-R together.**

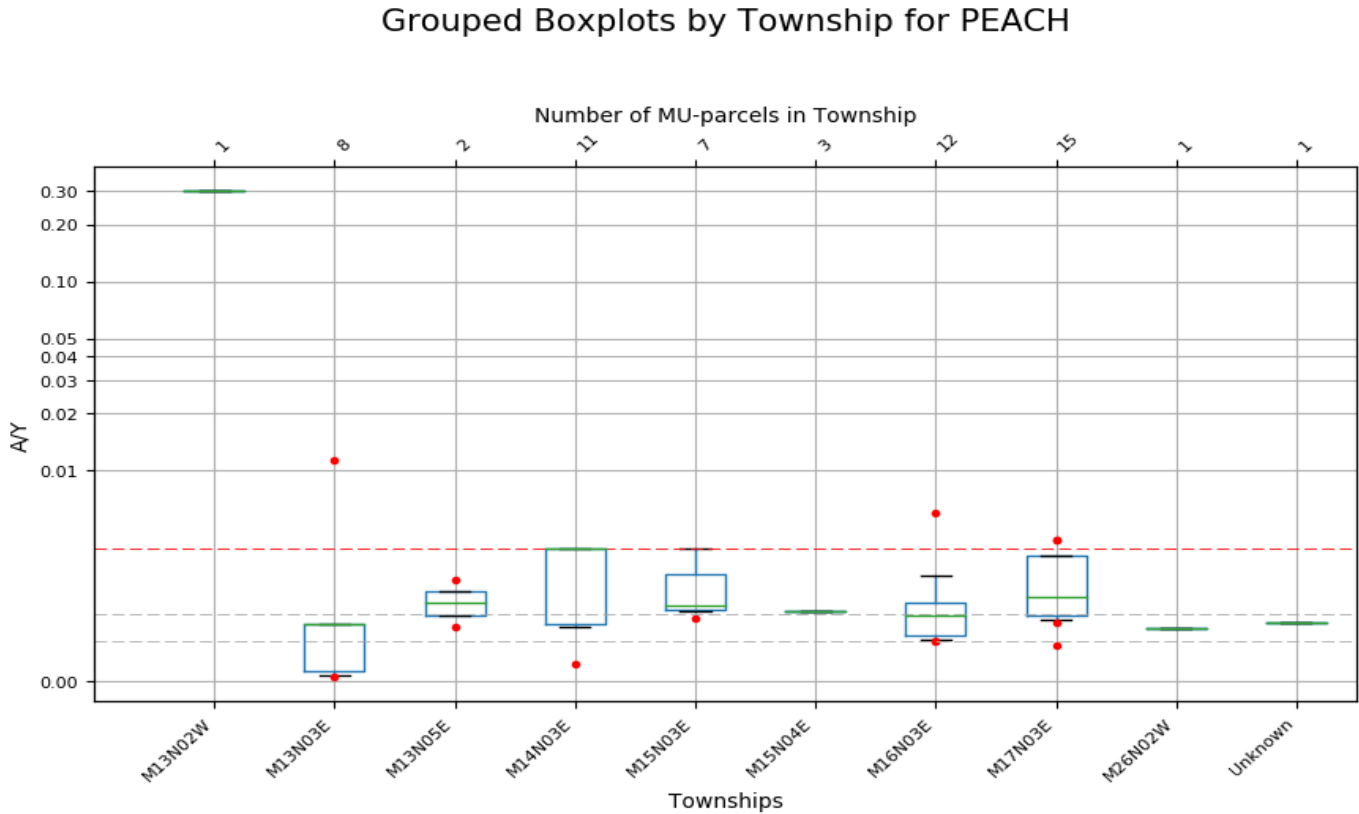
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XXI. PEACH

**Figure XXI-1. Box and Whisker plots of A/Y for PEACH management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XXI-1. A/Y Summary Statistics for PEACH management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
13N02W	1	0.3	0.3						
13N03E	8	0.0002	0.0113	0.0003	0.0004	0.0027	0.0027	0.0053	2
13N05E	2	0.0026	0.0048	0.0028	0.0032	0.0037	0.0042	0.0046	2
14N03E	11	0.0008	0.0063	0.0026	0.0027	0.0063	0.0063	0.0063	1
15N03E	7	0.003	0.0063	0.0032	0.0034	0.0036	0.0051	0.0063	1
15N04E	3	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0
16N03E	12	0.0019	0.008	0.0019	0.0022	0.0031	0.0037	0.005	3
17N03E	15	0.0017	0.0067	0.0028	0.0031	0.004	0.006	0.0064	4
26N02W	1	0.0025	0.0025						
Unknown	1	0.0028	0.0028						

**Table XXI-2. A/R Summary Statistics for PEACH management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
13N02W	1	265.4867	265.4867						
13N03E	8	0.164	10.0	0.2291	0.3695	2.398	2.398	4.6786	2
13N05E	2	2.2808	4.282	2.4809	2.7811	3.2814	3.7817	4.0819	2
14N03E	11	0.664	5.531	2.314	2.3735	5.531	5.531	5.531	1
15N03E	7	2.677	5.531	2.8414	3.024	3.146	4.509	5.531	1
15N04E	3	2.947	2.947	2.947	2.947	2.947	2.947	2.947	0
16N03E	12	1.77	3362.832	1.9735	2.5442	2.878	5.0887	3027.2568	4
17N03E	15	1.504	5.951	2.5502	2.7525	3.513	5.31	5.6946	4
26N02W	1	2.2124	2.2124						
Unknown	1	2.513	2.513						

**Table XXI-3. A-R Summary Statistics for PEACH management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

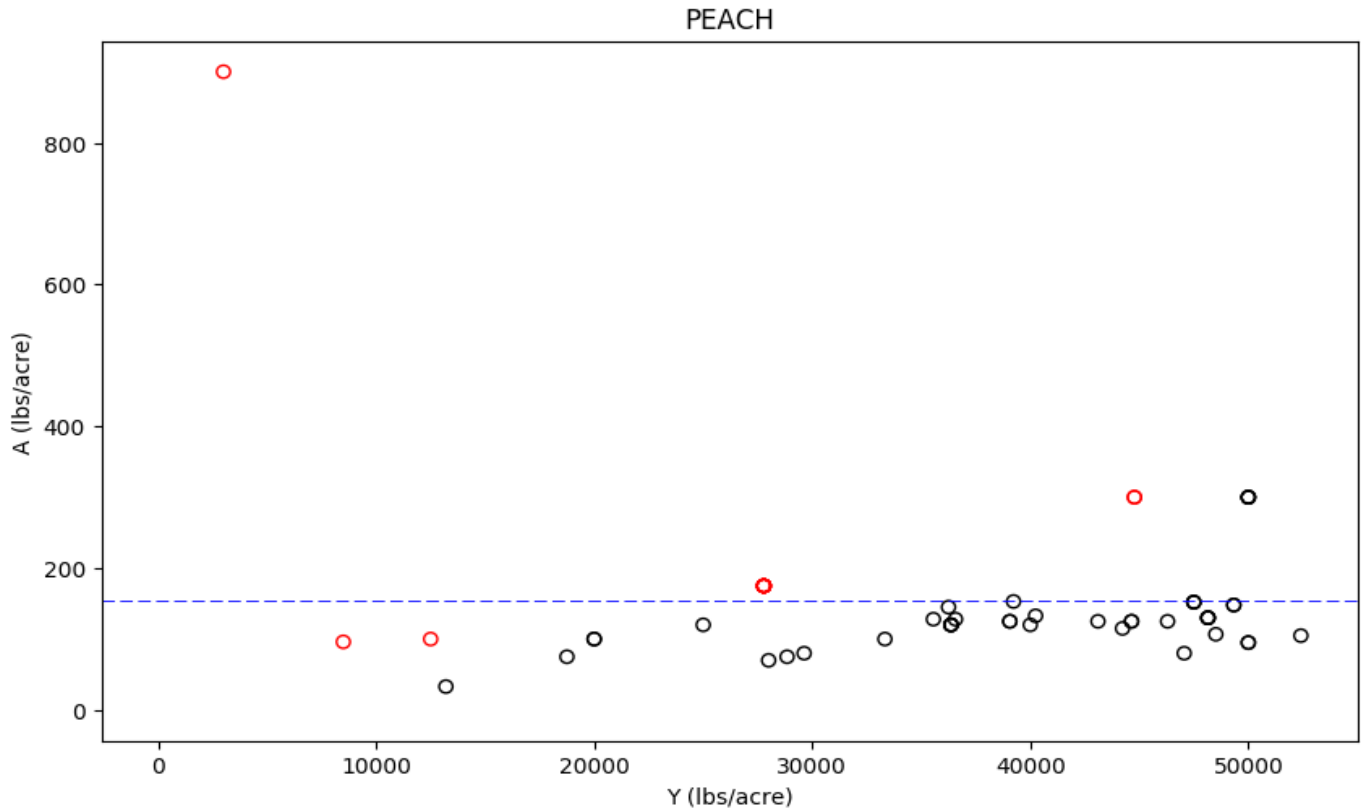
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
13N02W	1	897.0	897.0						
13N03E	8	-587.4	86.4	-409.39	-208.9	75.8	75.8	78.98	2
13N05E	2	42.12	91.98	47.1	54.58	67.05	79.51	86.99	2
14N03E	11	-76.0	143.4	46.1	69.0	143.4	143.4	143.4	1
15N03E	7	79.3	143.4	83.74	87.0	92.7	126.25	143.4	1
15N04E	3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	0
16N03E	12	38.4	95.0	46.25	59.73	79.15	86.23	94.23	4
17N03E	15	26.8	249.6	62.14	76.15	98.7	243.5	247.16	4
26N02W	1	18.08	18.08						
Unknown	1	75.3	75.3						

**Table XXI-4. Summary Statistics for PEACH management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	61	0.0002	0.3	0.0019	0.0027	0.0032	0.006	0.0063	10
A/R	61	0.164	3362.832	1.947	2.398	2.947	5.31	5.951	11
A-R	61	-587.4	897.0	38.4	74.8	80.9	109.1	243.5	9

**Figure XXI-2. Scatter plot of A vs. Y for PEACH with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



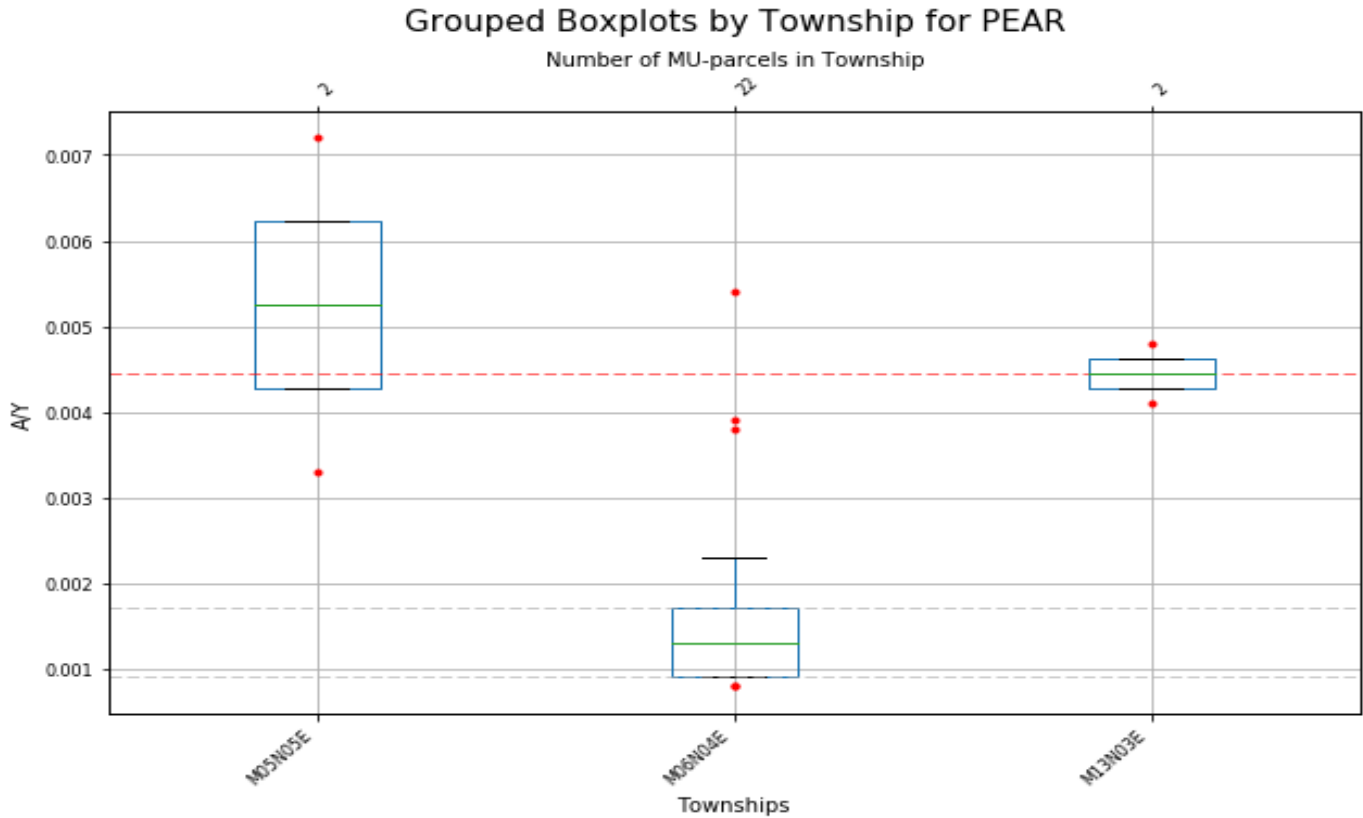
NOTE: 4 records above Yield value of 55000 lbs/acre not shown to avoid skewing of scatter plot



# XXII. PEAR

**Figure XXII-1. Box and Whisker plots of A/Y for PEAR management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XXII-1. A/Y Summary Statistics for PEAR management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N05E	2	0.0033	0.0072	0.0037	0.0043	0.0052	0.0062	0.0068	2
06N04E	22	0.0008	0.0054	0.0009	0.0009	0.0013	0.0017	0.0037	5
13N03E	2	0.0041	0.0048	0.0042	0.0043	0.0044	0.0046	0.0047	2

**Table XXII-2. A/R Summary Statistics for PEAR management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N05E	2	5.1231	11.1538	5.7262	6.6308	8.1384	9.6461	10.5507	2
06N04E	22	1.2679	8.3615	1.3279	1.4403	2.0615	2.6754	5.5461	6
13N03E	2	6.308	7.385	6.4157	6.5772	6.8465	7.1158	7.2773	2

**Table XXII-3. A-R Summary Statistics for PEAR management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

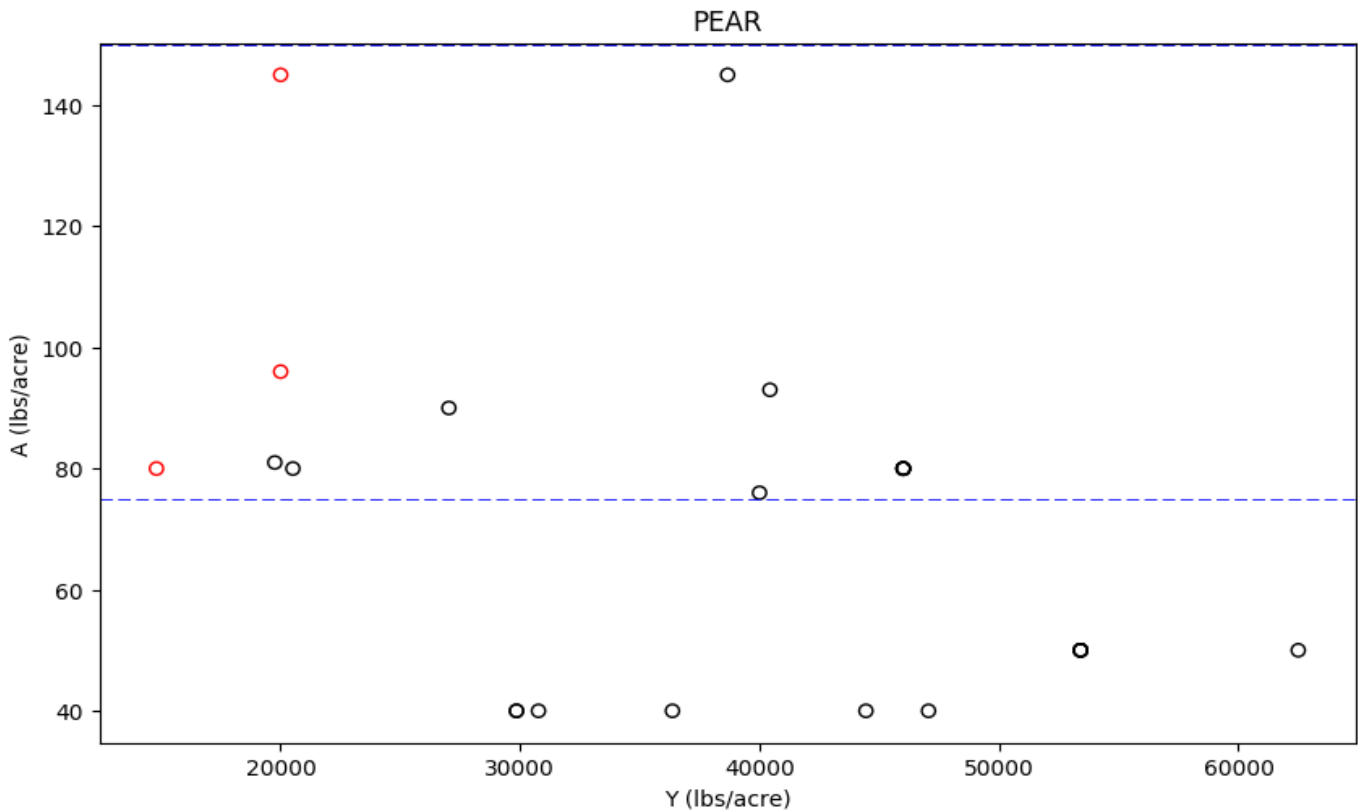
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N05E	2	72.43	132.0	78.39	87.32	102.22	117.11	126.04	2
06N04E	22	9.41	119.87	11.04	15.29	20.6	50.1	66.7	6
13N03E	2	68.2	83.0	69.68	71.9	75.6	79.3	81.52	2

**Table XXII-4. Summary Statistics for PEAR management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	26	0.0008	0.0072	0.0009	0.0009	0.0017	0.003	0.0044	5
A/R	26	1.2679	11.1538	1.3778	1.4403	2.6754	4.7269	6.8465	6
A-R	26	9.41	132.0	12.93	15.29	50.05	66.67	77.72	6

**Figure XXII-2. Scatter plot of A vs. Y for PEAR with all T-R together.**

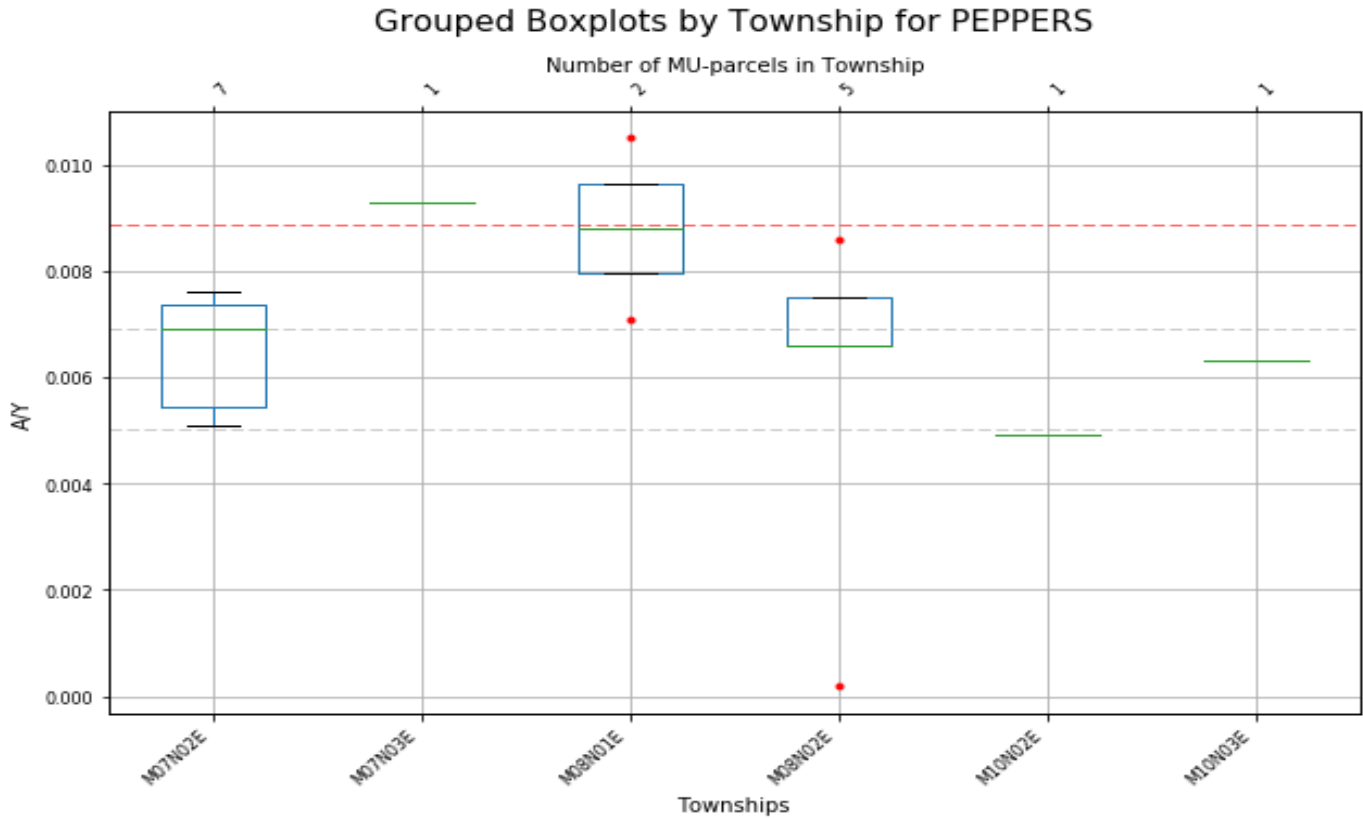
Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XXIII. PEPPERS

**Figure XXIII-1. Box and Whisker plots of A/Y for PEPPERS management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers ( $A/Y > 90\%$  percentile or  $< 10\%$  percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XXIII-1. A/Y Summary Statistics for PEPPERS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
07N02E	7	0.0051	0.0076	0.0051	0.0054	0.0069	0.0074	0.0076	0
07N03E	1	0.0093	0.0093						
08N01E	2	0.0071	0.0105	0.0074	0.008	0.0088	0.0096	0.0102	2
08N02E	5	0.0002	0.0086	0.0028	0.0066	0.0066	0.0075	0.0082	2
10N02E	1	0.0049	0.0049						
10N03E	1	0.0063	0.0063						

**Table XXIII-2. A/R Summary Statistics for PEPPERS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
07N02E	7	3.079	4.5909	3.079	3.2715	4.1274	4.4099	4.5703	1
07N03E	1	5.616	5.616						
08N01E	2	4.2596	6.3181	4.4654	4.7742	5.2888	5.8035	6.1123	2
08N02E	5	0.1389	5.1896	1.6636	3.9506	3.9506	4.4897	4.9096	2
10N02E	1	2.9428	2.9428						
10N03E	1	3.7952	3.7952						

**Table XXIII-3. A-R Summary Statistics for PEPPERS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

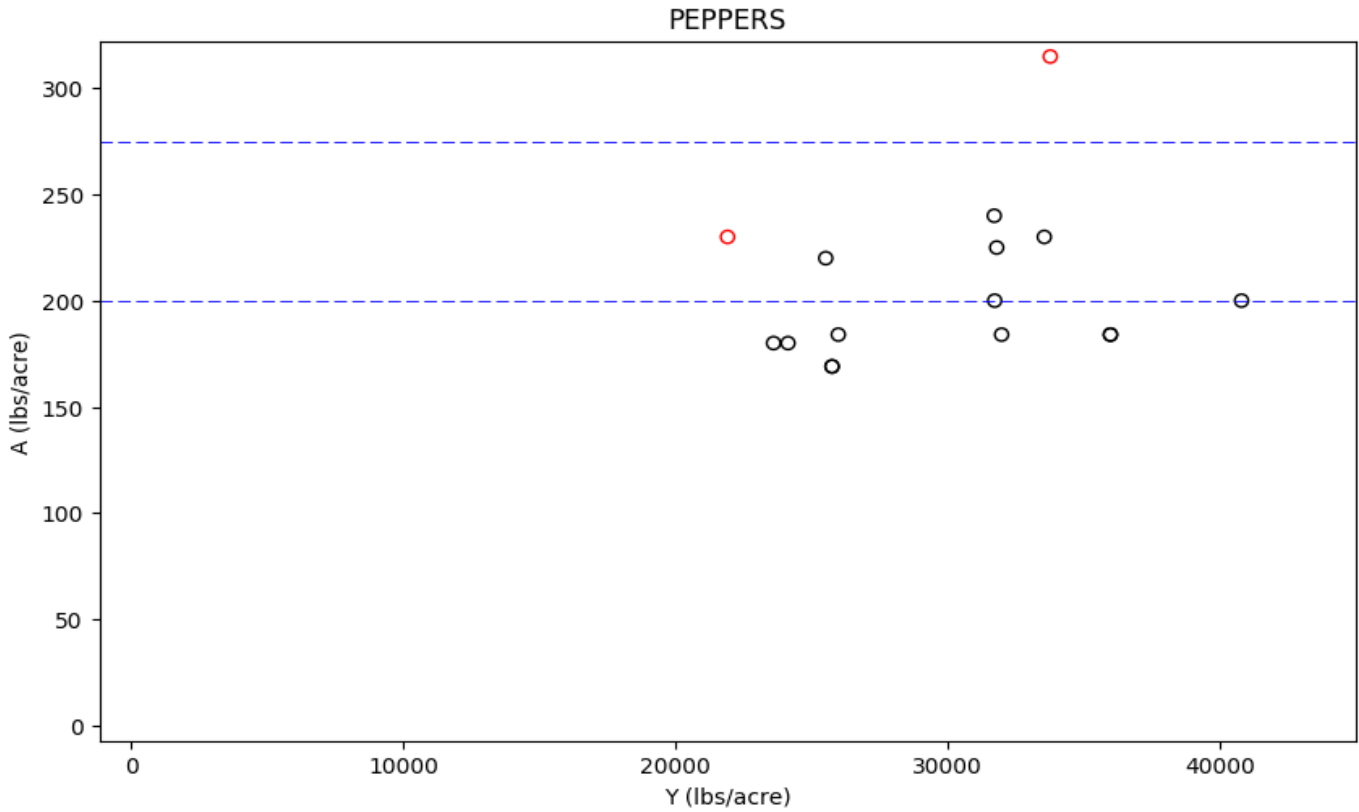
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
07N02E	7	124.24	181.4	124.24	124.89	130.88	149.08	166.95	1
07N03E	1	251.79	251.79						
08N01E	2	165.61	191.22	168.17	172.01	178.41	184.82	188.66	2
08N02E	5	-1704.52	171.83	-978.3	111.03	111.03	124.32	152.82	2
10N02E	1	132.04	132.04						
10N03E	1	147.3	147.3						

**Table XXIII-4. Summary Statistics for PEPPERS management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	17	0.0002	0.0105	0.005	0.0058	0.0069	0.0076	0.0089	4
A/R	17	0.1389	6.3181	3.0245	3.4639	4.1274	4.5565	5.3602	4
A-R	17	-1704.52	251.79	111.03	124.24	132.04	165.61	185.33	3

**Figure XXIII-2. Scatter plot of A vs. Y for PEPPERS with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.

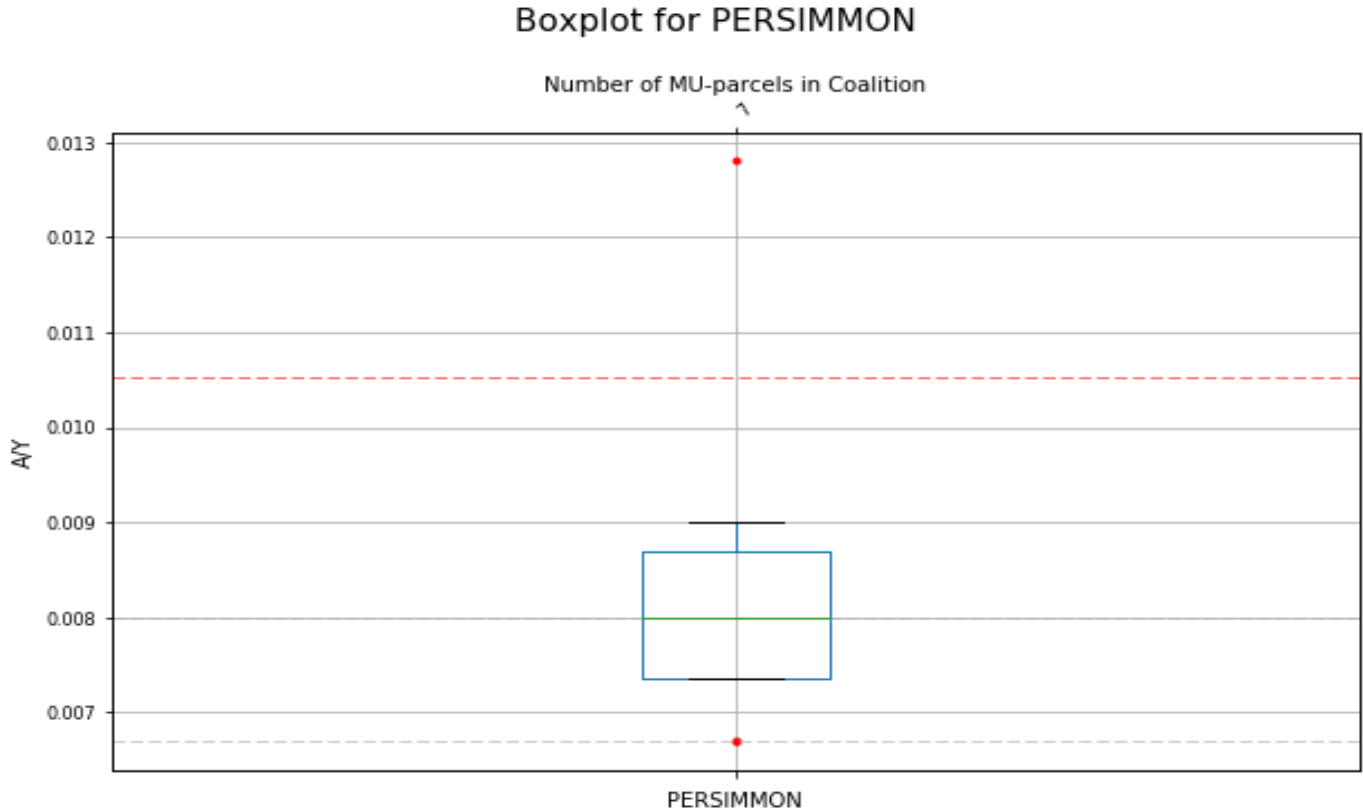


NOTE: 1 records above Yield value of 45000 lbs/acre not shown to avoid skewing of scatter plot

# XXIV. PERSIMMON

**Figure XXIV-1. Box and Whisker plots of A/Y for PERSIMMON management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



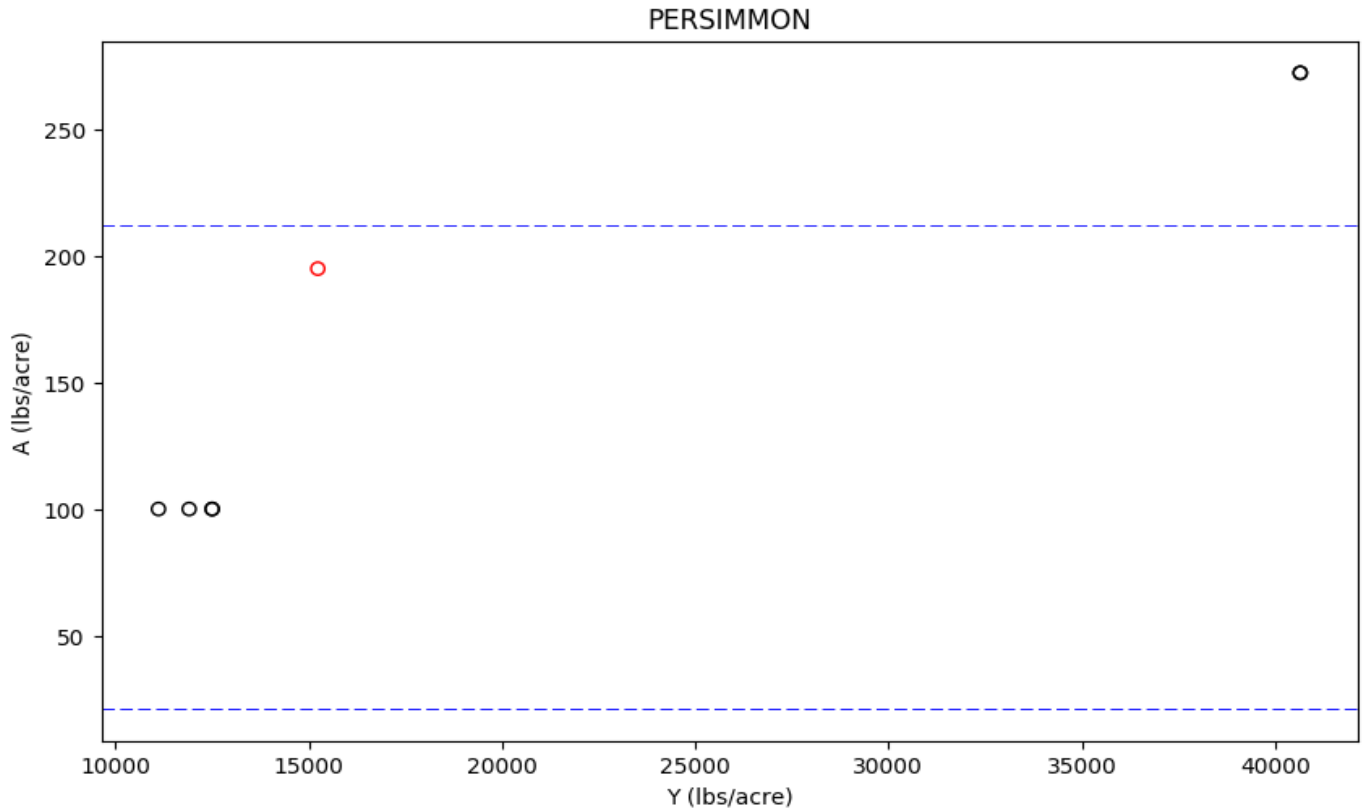
**Table XXIV-1. A/Y Summary Statistics for PERSIMMON management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
7	0.0067	0.0128	0.0067	0.0074	0.008	0.0087	0.0105	3

**Figure XXIV-2. Scatter plot of A vs. Y for PERSIMMON with all T-R together.**

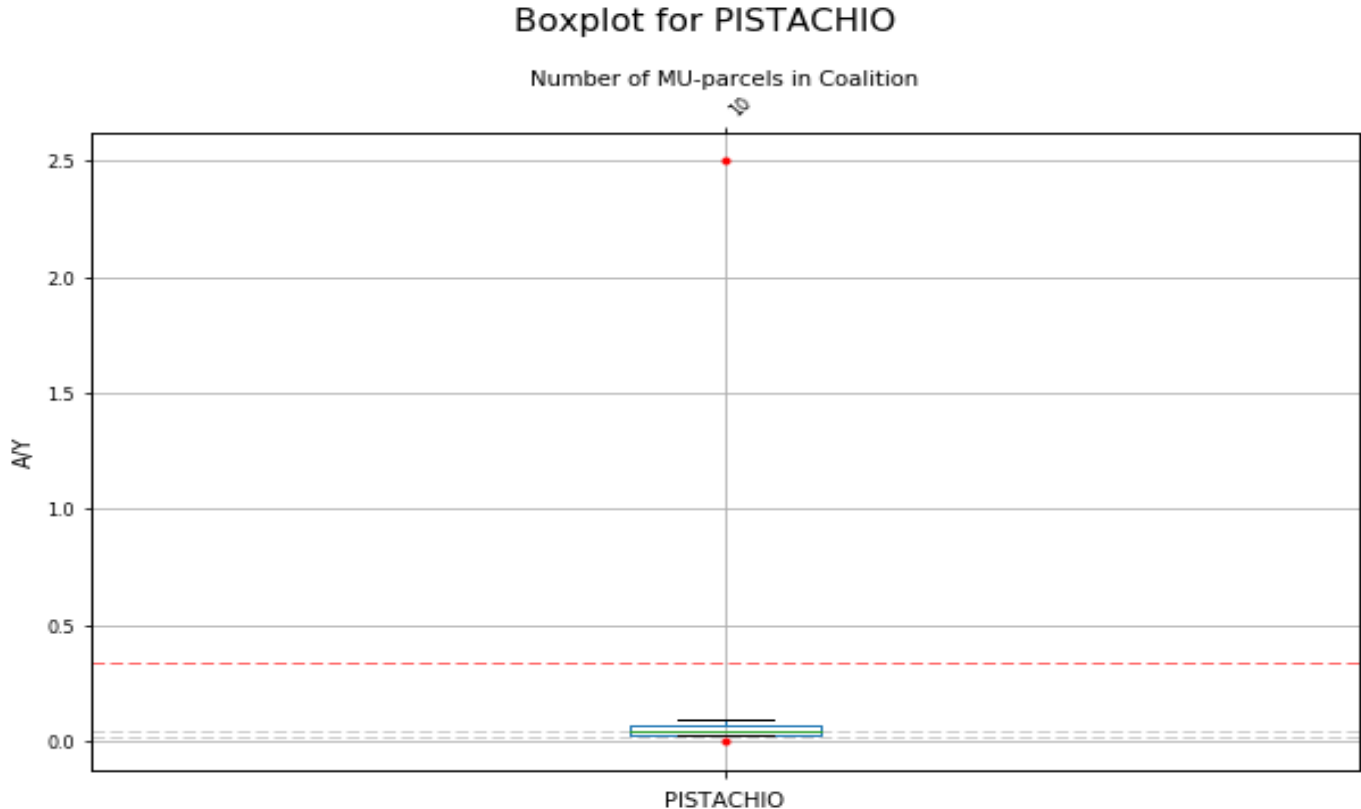
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XXV. PISTACHIO

**Figure XXV-1. Box and Whisker plots of A/Y for PISTACHIO management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XXV-1. A/Y Summary Statistics for PISTACHIO management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
10	0.0	2.5	0.0207	0.023	0.04	0.065	0.3355	2

**Table XXV-2. A/R Summary Statistics for PISTACHIO management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
9	0.82	89.1266	0.82	0.82	1.4617	2.3886	20.5348	1



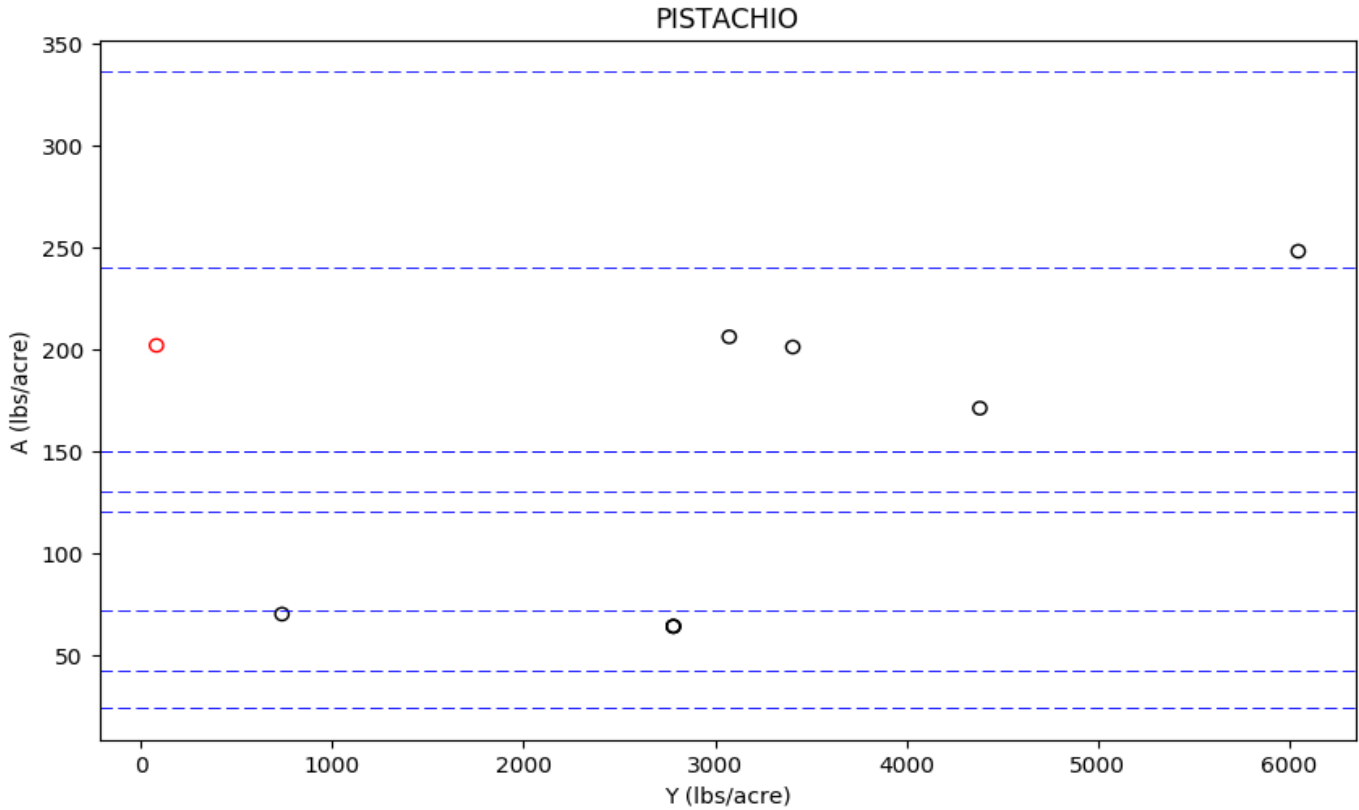
**Table XXV-3. A-R Summary Statistics for PISTACHIO management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
10	-14.1	199.54	-14.1	1.43	63.83	116.25	184.65	1

**Figure XXV-2. Scatter plot of A vs. Y for PISTACHIO with all T-R together.**

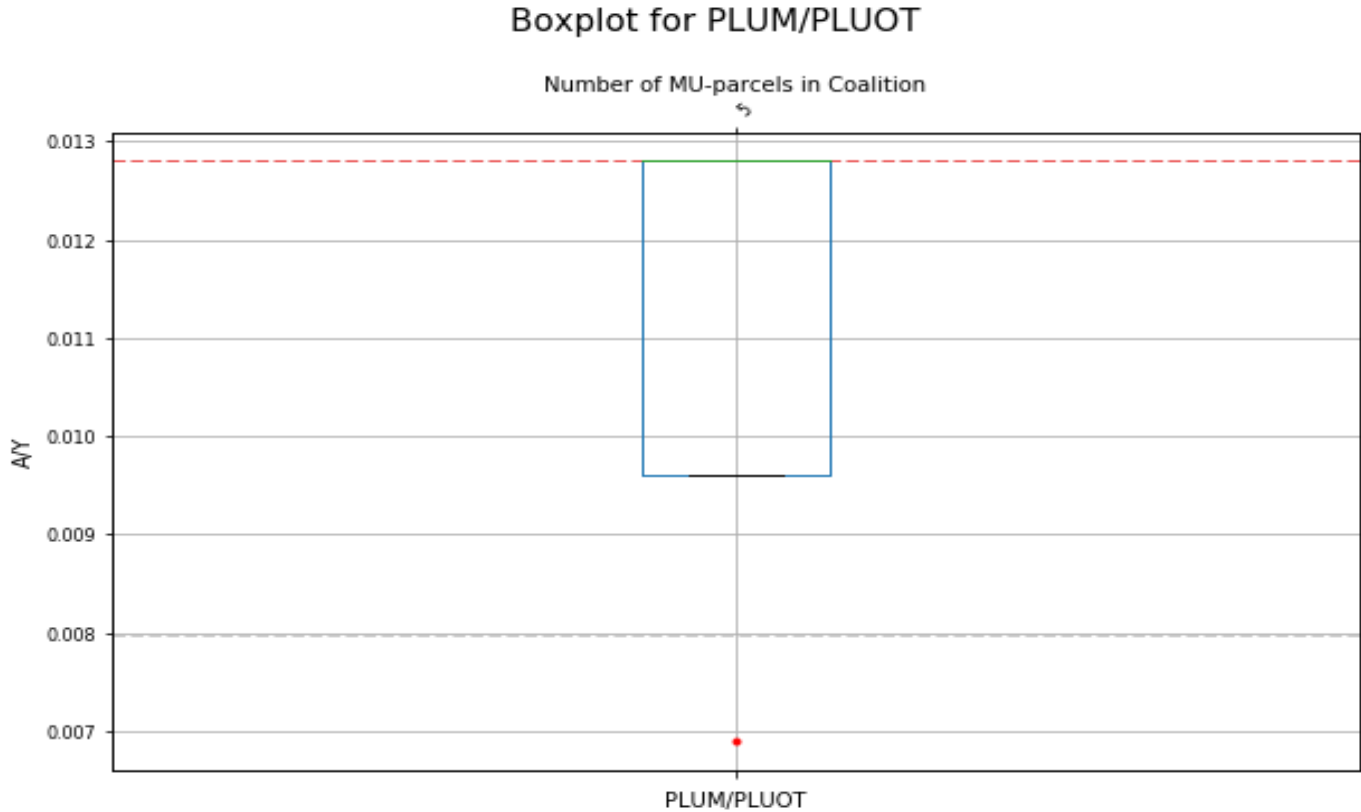
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XXVI. PLUM/PLUOT

**Figure XXVI-1. Box and Whisker plots of A/Y for PLUM/PLUOT management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XXVI-1. A/Y Summary Statistics for PLUM/PLUOT management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
5	0.0069	0.0128	0.008	0.0096	0.0128	0.0128	0.0128	1

**Table XXVI-2. A/R Summary Statistics for PLUM/PLUOT management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
5	4.859	9.0141	5.6198	6.761	9.0141	9.0141	9.0141	1

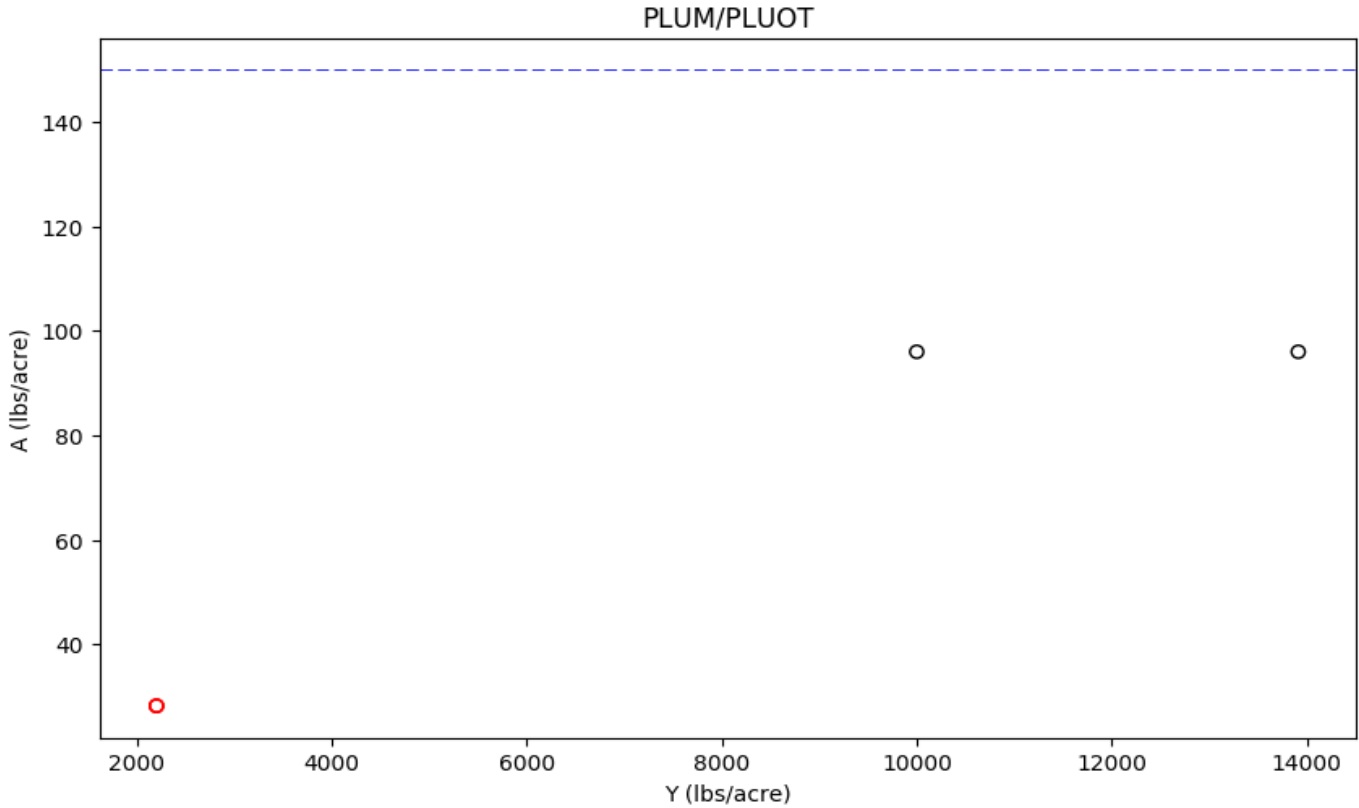
**Table XXVI-3. A-R Summary Statistics for PLUM/PLUOT management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
5	25.07	81.8	25.07	25.07	25.07	76.2	79.56	1

**Figure XXVI-2. Scatter plot of A vs. Y for PLUM/PLUOT with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.

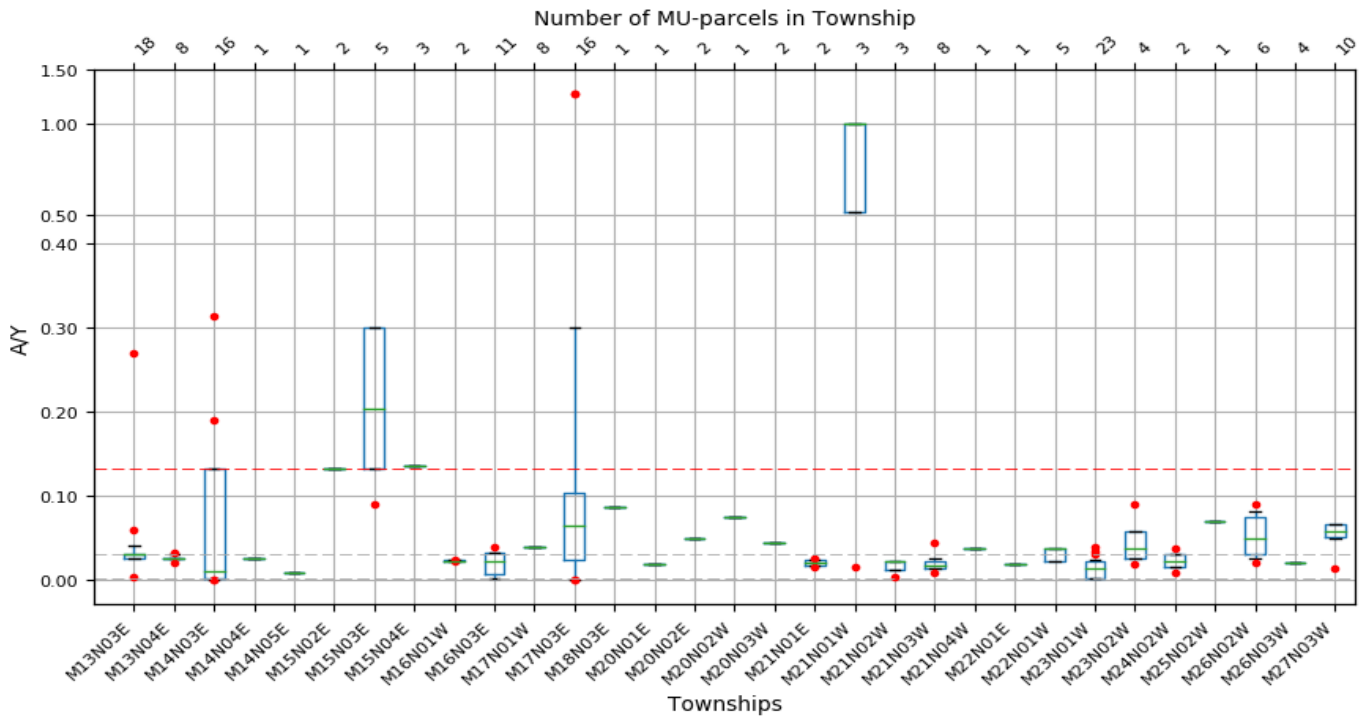


# XXVII. PRUNES

**Figure XXVII-1. Box and Whisker plots of A/Y for PRUNES management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers ( $A/Y > 90\%$  percentile or  $< 10\%$  percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.

**Grouped Boxplots by Township for PRUNES**



**Table XXVII-1. A/Y Summary Statistics for PRUNES management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
13N03E	18	0.0033	0.27	0.025	0.025	0.0306	0.0306	0.0463	3
13N04E	8	0.021	0.033	0.0238	0.025	0.025	0.0262	0.0309	2
14N03E	16	0.0001	0.3133	0.0002	0.0025	0.0111	0.133	0.1615	4
14N04E	1	0.025	0.025						
14N05E	1	0.0082	0.0082						
15N02E	2	0.133	0.133	0.133	0.133	0.133	0.133	0.133	0
15N03E	5	0.09	0.301	0.1072	0.133	0.2031	0.301	0.301	1
15N04E	3	0.1364	0.1364	0.1364	0.1364	0.1364	0.1364	0.1364	0
16N01W	2	0.023	0.0231	0.023	0.023	0.023	0.0231	0.0231	2
16N03E	11	0.002	0.0385	0.002	0.0075	0.023	0.032	0.032	1
17N01W	8	0.0389	0.0389	0.0389	0.0389	0.0389	0.0389	0.0389	0
17N03E	16	0.0001	1.25	0.0004	0.0242	0.0644	0.104	0.7755	4
18N03E	1	0.086	0.086						
20N01E	1	0.018	0.018						
20N02E	2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0
20N02W	1	0.075	0.075						
20N03W	2	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0
21N01E	2	0.0151	0.026	0.0162	0.0178	0.0206	0.0233	0.0249	2
21N01W	3	0.0156	1.0	0.2125	0.5078	1.0	1.0	1.0	1
21N02W	3	0.0029	0.0218	0.0067	0.0124	0.0218	0.0218	0.0218	1
21N03W	8	0.0081	0.045	0.0122	0.014	0.0179	0.0229	0.0318	2
21N04W	1	0.0382	0.0382						
22N01E	1	0.0185	0.0185						
22N01W	5	0.022	0.038	0.022	0.022	0.038	0.038	0.038	0
23N01W	23	0.002	0.0395	0.002	0.002	0.0135	0.0219	0.0301	3
23N02W	4	0.0195	0.09	0.0218	0.0253	0.0371	0.0578	0.0771	2
24N02W	2	0.008	0.038	0.011	0.0155	0.023	0.0305	0.035	2
25N02W	1	0.07	0.07						
26N02W	6	0.0199	0.09	0.0224	0.0312	0.05	0.074	0.086	2
26N03W	4	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0
27N03W	10	0.014	0.066	0.0464	0.051	0.0582	0.0658	0.066	1

**Table XXVII-2. A/R Summary Statistics for PRUNES management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
13N03E	18	0.583	48.214	4.464	4.464	5.456	5.456	8.2734	3
13N04E	8	3.75	5.893	4.2498	4.464	4.464	4.6873	5.5178	2
14N03E	16	0.009	55.952	0.0265	0.434	1.985	23.75	28.8395	4
14N04E	1	4.464	4.464						
14N05E	1	1.459	1.459						
15N02E	2	23.75	23.75	23.75	23.75	23.75	23.75	23.75	0
15N03E	5	16.071	53.75	19.1426	23.75	36.272	53.75	53.75	1
15N04E	3	24.35	24.35	24.35	24.35	24.35	24.35	24.35	0
16N01W	2	4.1071	4.1209	4.1085	4.1106	4.114	4.1174	4.1195	2
16N03E	11	0.359	6.875	0.359	1.34	4.107	5.714	5.714	1
17N01W	8	6.9446	6.9446	6.9446	6.9446	6.9446	6.9446	6.9446	0
17N03E	16	0.022	223.214	0.0715	4.3145	11.5	18.571	138.482	4
18N03E	1	15.357	15.357						
20N01E	1	3.214	3.214						
20N02E	2	8.929	8.929	8.929	8.929	8.929	8.929	8.929	0
20N02W	1	13.3929	13.3929						
20N03W	2	8.0357	8.0357	8.0357	8.0357	8.0357	8.0357	8.0357	0
21N01E	2	2.696	4.643	2.8907	3.1828	3.6695	4.1562	4.4483	2
21N01W	3	2.777	9.5016	4.1219	6.1393	9.5016	9.5016	9.5016	1
21N02W	3	0.5267	3.9004	1.2014	2.2135	3.9004	3.9004	3.9004	1
21N03W	8	1.4466	8.0357	2.1848	2.5012	3.2008	4.091	5.6746	2
21N04W	1	6.8125	6.8125						
22N01E	1	3.295	3.295						
22N01W	5	3.929	6.786	3.929	3.929	6.786	6.786	6.786	0
23N01W	23	0.361	7.054	0.361	0.361	2.411	3.902	5.375	3
23N02W	4	3.482	16.0714	3.8972	4.5199	6.6294	10.3125	13.7678	2
24N02W	2	0.0007	6.7857	0.6792	1.697	3.3932	5.0894	6.1072	2
25N02W	1	12.5	12.5						
26N02W	6	0.3554	16.0714	2.4098	5.5804	8.9286	13.2143	15.3572	2
26N03W	4	3.5714	3.5714	3.5714	3.5714	3.5714	3.5714	3.5714	0
27N03W	10	2.5	11.7857	8.2857	9.1072	10.4018	11.7411	11.7857	1

**Table XXVII-3. A-R Summary Statistics for PRUNES management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

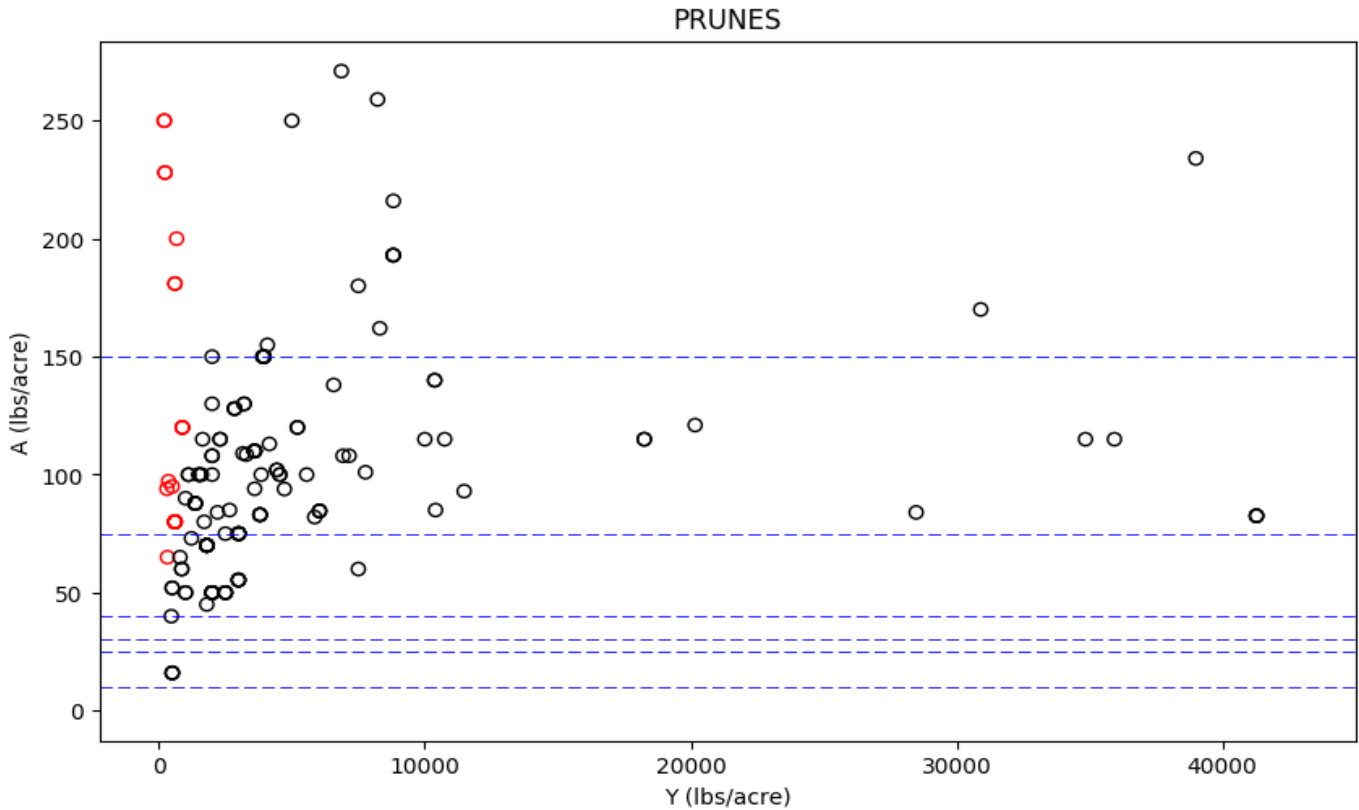
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
13N03E	18	-82.2	112.1	38.8	38.8	77.95	89.8	100.27	3
13N04E	8	58.2	101.2	58.2	58.2	58.2	68.28	93.43	1
14N03E	16	-22422.0	92.3	-12139.95	-531.08	57.0	76.6	84.4	4
14N04E	1	58.2	58.2						
14N05E	1	26.74	26.74						
15N02E	2	76.6	76.6	76.6	76.6	76.6	76.6	76.6	0
15N03E	5	63.2	177.57	68.56	76.6	84.4	177.57	177.57	1
15N04E	3	115.1	115.1	115.1	115.1	115.1	115.1	115.1	0
16N01W	2	91.0	91.0	91.0	91.0	91.0	91.0	91.0	0
16N03E	11	-147.44	138.0	-147.44	-67.12	13.2	77.17	128.18	1
17N01W	8	60.0	60.0	60.0	60.0	60.0	60.0	60.0	0
17N03E	16	-3942.0	248.9	-1550.75	-193.48	62.65	80.2	222.6	4
18N03E	1	37.4	37.4						
20N01E	1	68.9	68.9						
20N02E	2	44.4	44.4	44.4	44.4	44.4	44.4	44.4	0
20N02W	1	139.0	139.0						
20N03W	2	112.0	112.0	112.0	112.0	112.0	112.0	112.0	0
21N01E	2	67.9	78.5	68.96	70.55	73.2	75.85	77.44	2
21N01W	3	69.1	204.0	96.08	136.55	204.0	204.0	204.0	1
21N02W	3	-75.0	62.0	-47.6	-6.5	62.0	62.0	62.0	1
21N03W	8	29.0	112.0	44.12	50.6	56.3	65.0	85.4	2
21N04W	1	72.0	72.0						
22N01E	1	38.55	38.55						
22N01W	5	74.5	127.9	74.5	74.5	127.9	127.9	127.9	0
23N01W	23	-297.92	232.58	-297.92	-297.92	38.55	117.4	162.0	3
23N02W	4	70.47	115.48	76.29	85.01	91.82	99.2	108.97	2
24N02W	2	-83940.0	132.16	-75532.78	-62921.96	-41903.92	-20885.88	-8275.06	2
25N02W	1	105.8	105.8						
26N02W	6	-170.34	222.0	-67.71	41.33	74.68	92.53	157.89	2
26N03W	4	36.0	36.0	36.0	36.0	36.0	36.0	36.0	0
27N03W	10	49.2	118.8	86.86	91.52	94.16	100.79	103.79	2

**Table XXVII-4. Summary Statistics for PRUNES management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	171	0.0001	1.25	0.002	0.0185	0.03	0.0568	0.133	22
A/R	171	0.0007	223.214	0.361	3.2545	5.357	9.5722	23.75	25
A-R	171	-83940.0	248.9	-170.34	38.55	66.1	91.52	128.18	34

**Figure XXVII-2. Scatter plot of A vs. Y for PRUNES with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



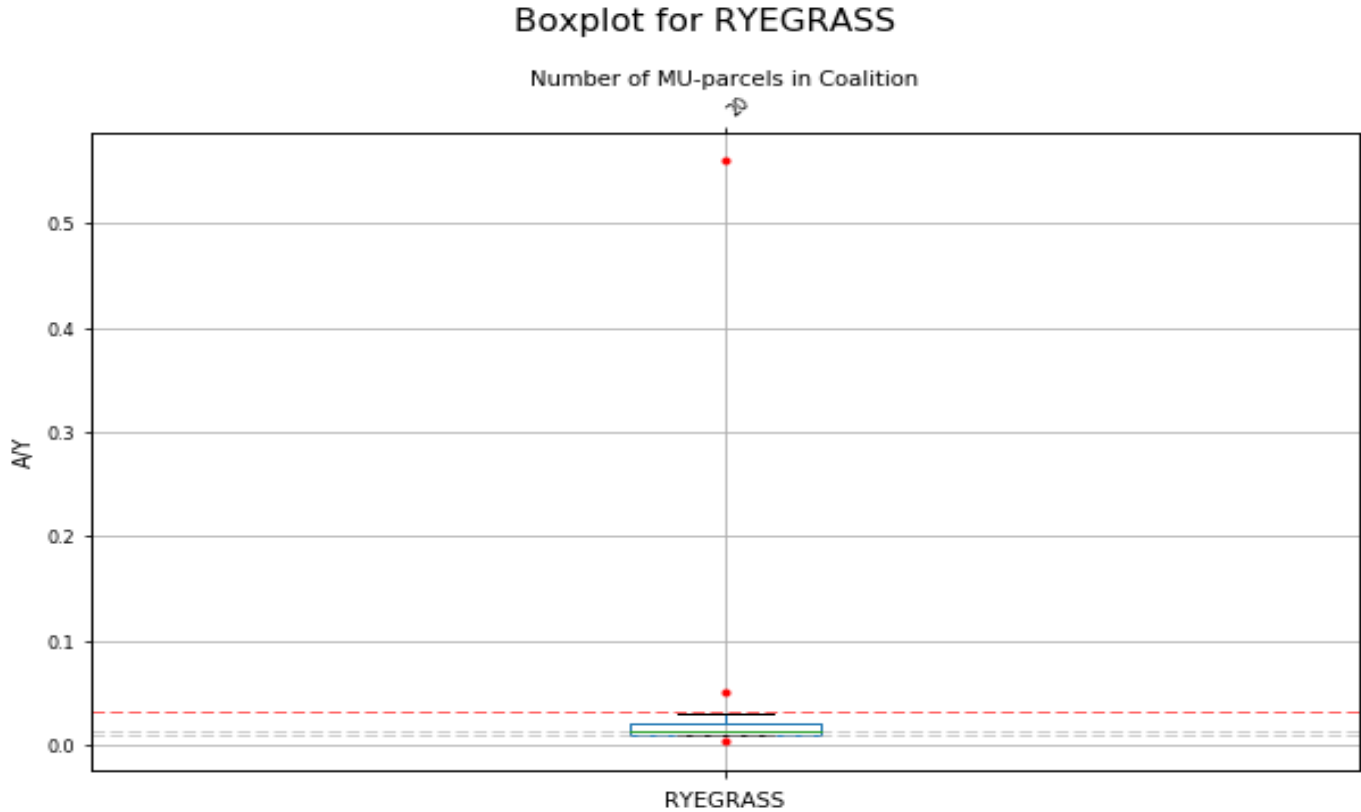
NOTE: 16 records above Yield value of 45000 lbs/acre not shown to avoid skewing of scatter plot



# XXVIII. RYEGRASS

**Figure XXVIII-1. Box and Whisker plots of A/Y for RYEGRASS management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XXVIII-1. A/Y Summary Statistics for RYEGRASS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
20	0.004	0.56	0.0097	0.01	0.0129	0.02	0.032	3

**Table XXVIII-2. A/R Summary Statistics for RYEGRASS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
20	0.1457	20.401	0.3542	0.3643	0.4706	0.7286	1.1658	3

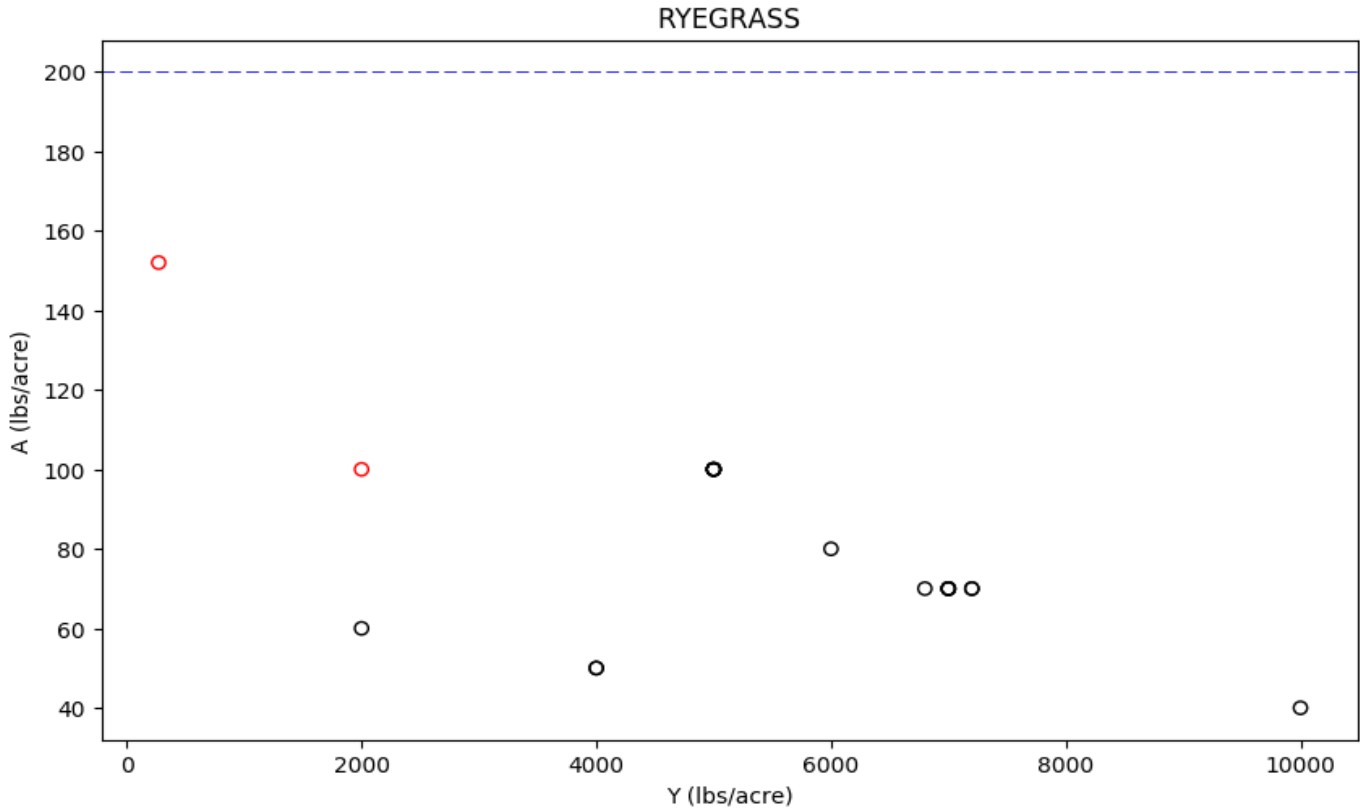
**Table XXVIII-3. A-R Summary Statistics for RYEGRASS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
20	-234.5	144.5	-127.64	-122.15	-59.8	-37.25	9.1	3

**Figure XXVIII-2. Scatter plot of A vs. Y for RYEGRASS with all T-R together.**

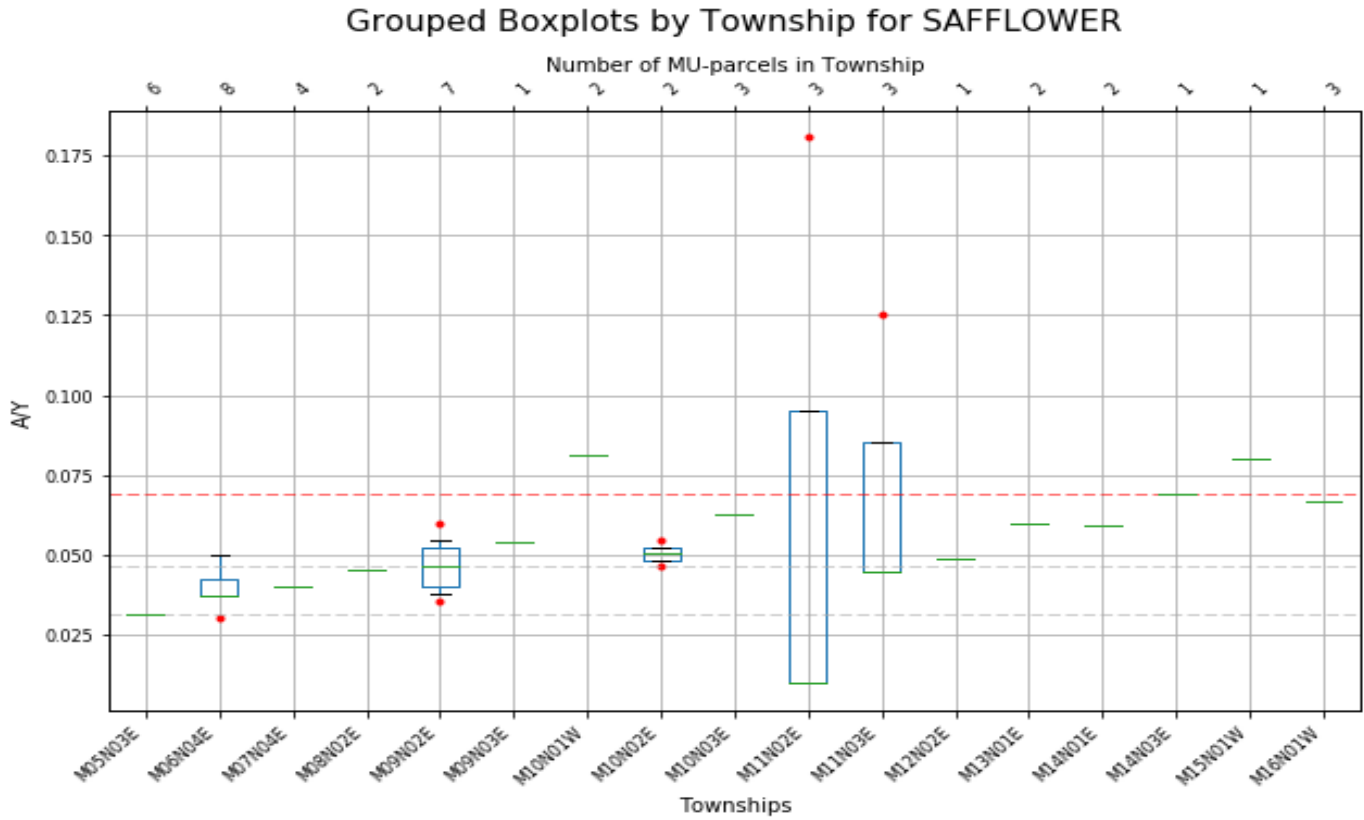
Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XXIX. SAFFLOWER

**Figure XXIX-1. Box and Whisker plots of A/Y for SAFFLOWER management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XXIX-1. A/Y Summary Statistics for SAFFLOWER management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N03E	6	0.0312	0.0312	0.0312	0.0312	0.0312	0.0312	0.0312	0
06N04E	8	0.0301	0.05	0.0349	0.037	0.037	0.0425	0.05	1
07N04E	4	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0
08N02E	2	0.0451	0.0451	0.0451	0.0451	0.0451	0.0451	0.0451	0
09N02E	7	0.0353	0.06	0.0366	0.0402	0.0462	0.0523	0.0568	2
09N03E	1	0.054	0.054						
10N01W	2	0.0811	0.0811	0.0811	0.0811	0.0811	0.0811	0.0811	0
10N02E	2	0.0462	0.0546	0.047	0.0483	0.0504	0.0525	0.0538	2
10N03E	3	0.0627	0.0627	0.0627	0.0627	0.0627	0.0627	0.0627	0
11N02E	3	0.01	0.1807	0.01	0.01	0.01	0.0954	0.1466	1
11N03E	3	0.045	0.125	0.045	0.045	0.045	0.085	0.109	1
12N02E	1	0.049	0.049						
13N01E	2	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0
14N01E	2	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0
14N03E	1	0.069	0.069						
15N01W	1	0.08	0.08						
16N01W	3	0.0667	0.0667	0.0667	0.0667	0.0667	0.0667	0.0667	0

**Table XXIX-2. A/R Summary Statistics for SAFFLOWER management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N03E	6	1.1004	1.1004	1.1004	1.1004	1.1004	1.1004	1.1004	0
06N04E	8	1.0606	1.7606	1.2301	1.3028	1.3028	1.4965	1.7606	1
07N04E	4	1.4085	1.4085	1.4085	1.4085	1.4085	1.4085	1.4085	0
08N02E	2	1.5897	1.5897	1.5897	1.5897	1.5897	1.5897	1.5897	0
09N02E	7	1.243	2.1127	1.2894	1.4146	1.625	1.8407	1.9976	2
09N03E	1	1.9014	1.9014						
10N01W	2	2.8549	2.8549	2.8549	2.8549	2.8549	2.8549	2.8549	0
10N02E	2	1.625	1.9208	1.6546	1.699	1.7729	1.8468	1.8912	2
10N03E	3	2.2085	2.2085	2.2085	2.2085	2.2085	2.2085	2.2085	0
11N02E	3	0.352	6.3615	0.352	0.352	0.352	3.3568	5.1596	1
11N03E	3	1.585	4.401	1.585	1.585	1.585	2.993	3.8378	1
12N02E	1	1.725	1.725						
13N01E	2	2.1127	2.1127	2.1127	2.1127	2.1127	2.1127	2.1127	0
14N01E	2	2.0775	2.0775	2.0775	2.0775	2.0775	2.0775	2.0775	0
14N03E	1	2.43	2.43						
15N01W	1	2.8169	2.8169						
16N01W	3	2.3474	2.3474	2.3474	2.3474	2.3474	2.3474	2.3474	0

**Table XXIX-3. A-R Summary Statistics for SAFFLOWER management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

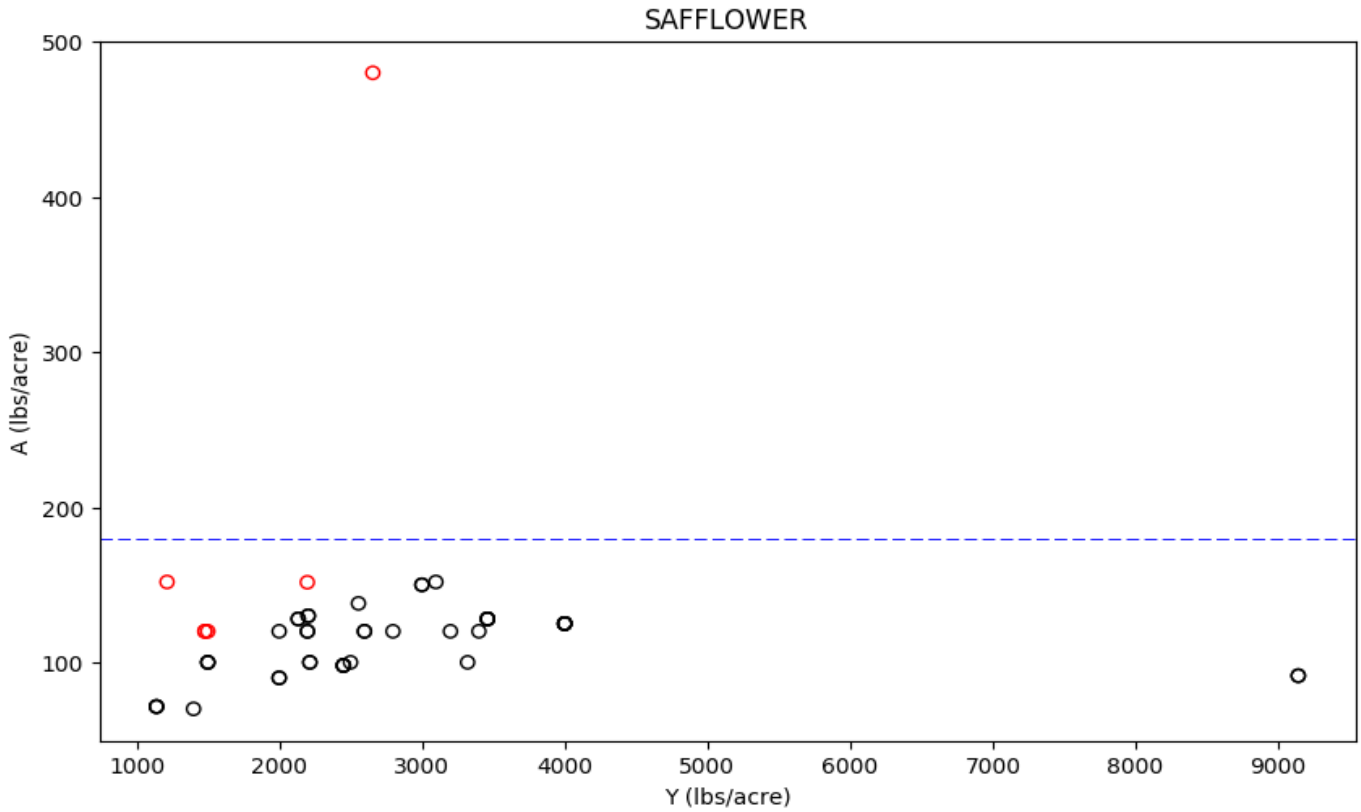
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
05N03E	6	11.4	11.4	11.4	11.4	11.4	11.4	11.4	0
06N04E	8	5.71	64.8	22.01	29.56	29.75	38.51	64.8	1
07N04E	4	28.42	28.42	28.42	28.42	28.42	28.42	28.42	0
08N02E	2	37.09	37.09	37.09	37.09	37.09	37.09	37.09	0
09N02E	7	23.46	63.2	26.85	29.68	40.47	51.84	59.8	2
09N03E	1	65.42	65.42						
10N01W	2	77.97	77.97	77.97	77.97	77.97	77.97	77.97	0
10N02E	2	46.15	57.53	47.29	49.0	51.84	54.68	56.39	2
10N03E	3	39.12	39.12	39.12	39.12	39.12	39.12	39.12	0
11N02E	3	-168.2	404.55	-168.2	-168.2	-168.2	118.17	290.0	1
11N03E	3	33.2	117.3	33.2	33.2	33.2	75.25	100.48	1
12N02E	1	63.8	63.8						
13N01E	2	67.0	67.0	67.0	67.0	67.0	67.0	67.0	0
14N01E	2	67.0	67.0	67.0	67.0	67.0	67.0	67.0	0
14N03E	1	89.2	89.2						
15N01W	1	77.0	77.0						
16N01W	3	57.0	57.0	57.0	57.0	57.0	57.0	57.0	0

**Table XXIX-4. Summary Statistics for SAFFLOWER management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	51	0.01	0.1807	0.0312	0.037	0.0462	0.06	0.069	8
A/R	51	0.352	6.3615	1.1004	1.3028	1.625	2.1127	2.43	8
A-R	51	-168.2	404.55	11.4	28.42	39.12	64.3	77.0	8

**Figure XXIX-2. Scatter plot of A vs. Y for SAFFLOWER with all T-R together.**

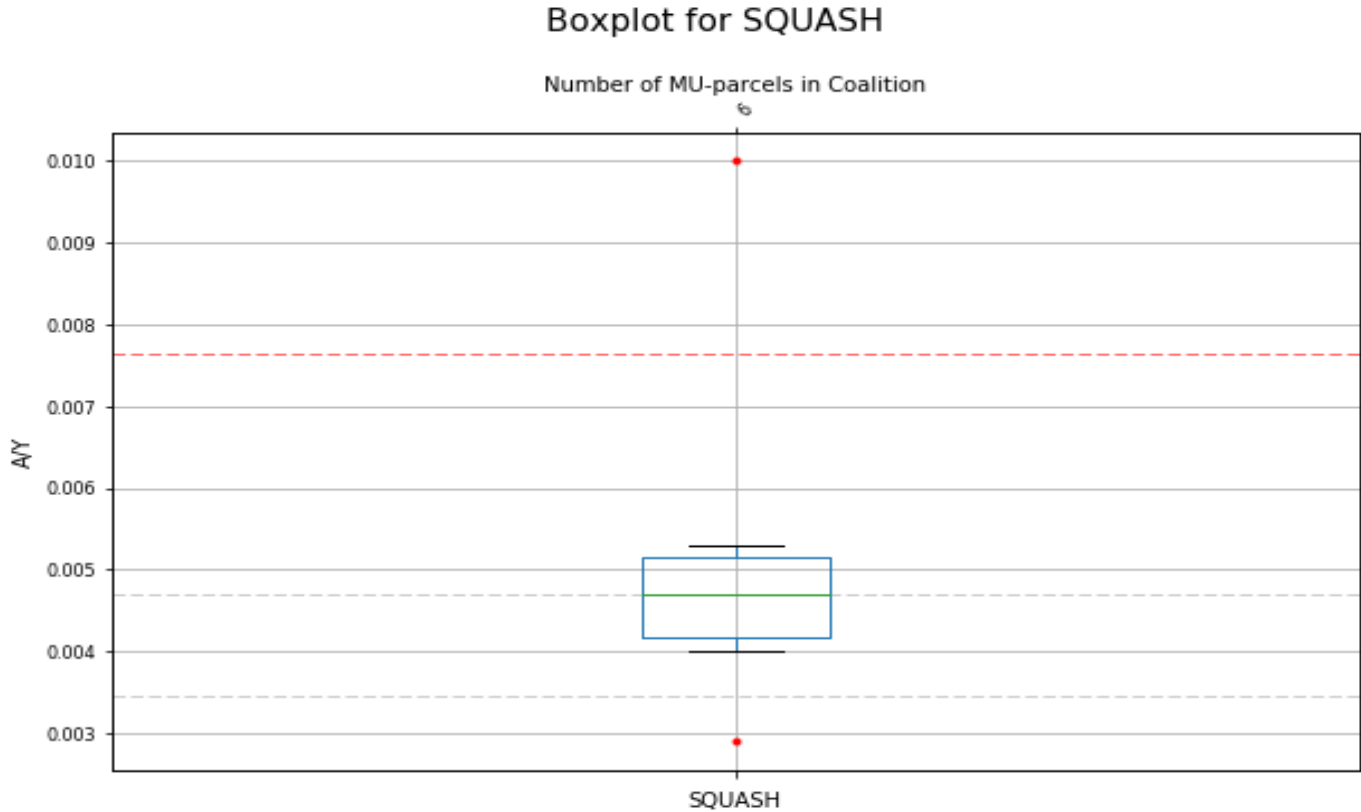
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XXX. SQUASH

**Figure XXX-1. Box and Whisker plots of A/Y for SQUASH management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XXX-1. A/Y Summary Statistics for SQUASH management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
6	0.0029	0.01	0.0034	0.0042	0.0047	0.0052	0.0076	2

**Table XXX-2. A/R Summary Statistics for SQUASH management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
6	0.0008	5.4348	0.001	0.0013	1.0876	2.6834	4.144	2



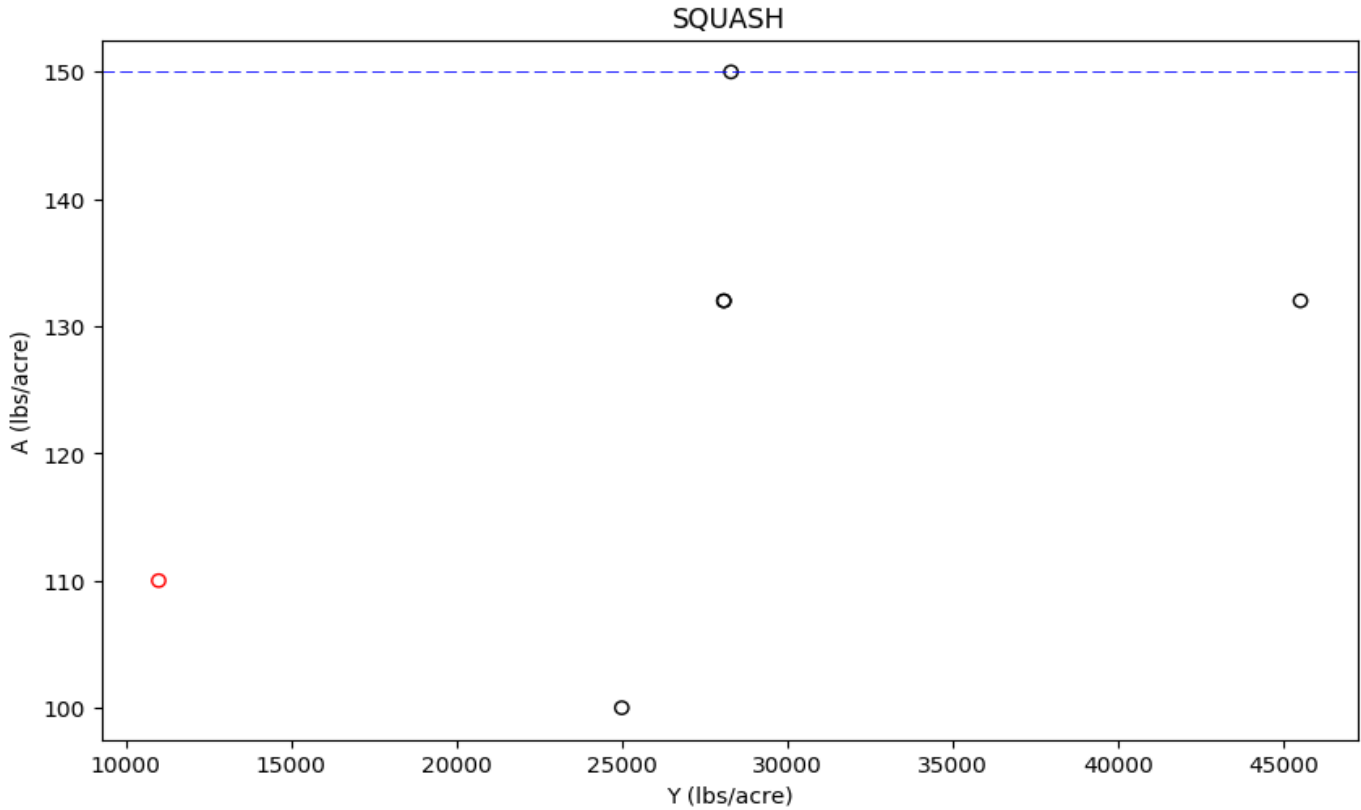
**Table XXX-3. A-R Summary Statistics for SQUASH management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
6	-169148.0	97.43	-136208.32	-103268.64	-51607.32	80.82	93.59	2

**Figure XXX-2. Scatter plot of A vs. Y for SQUASH with all T-R together.**

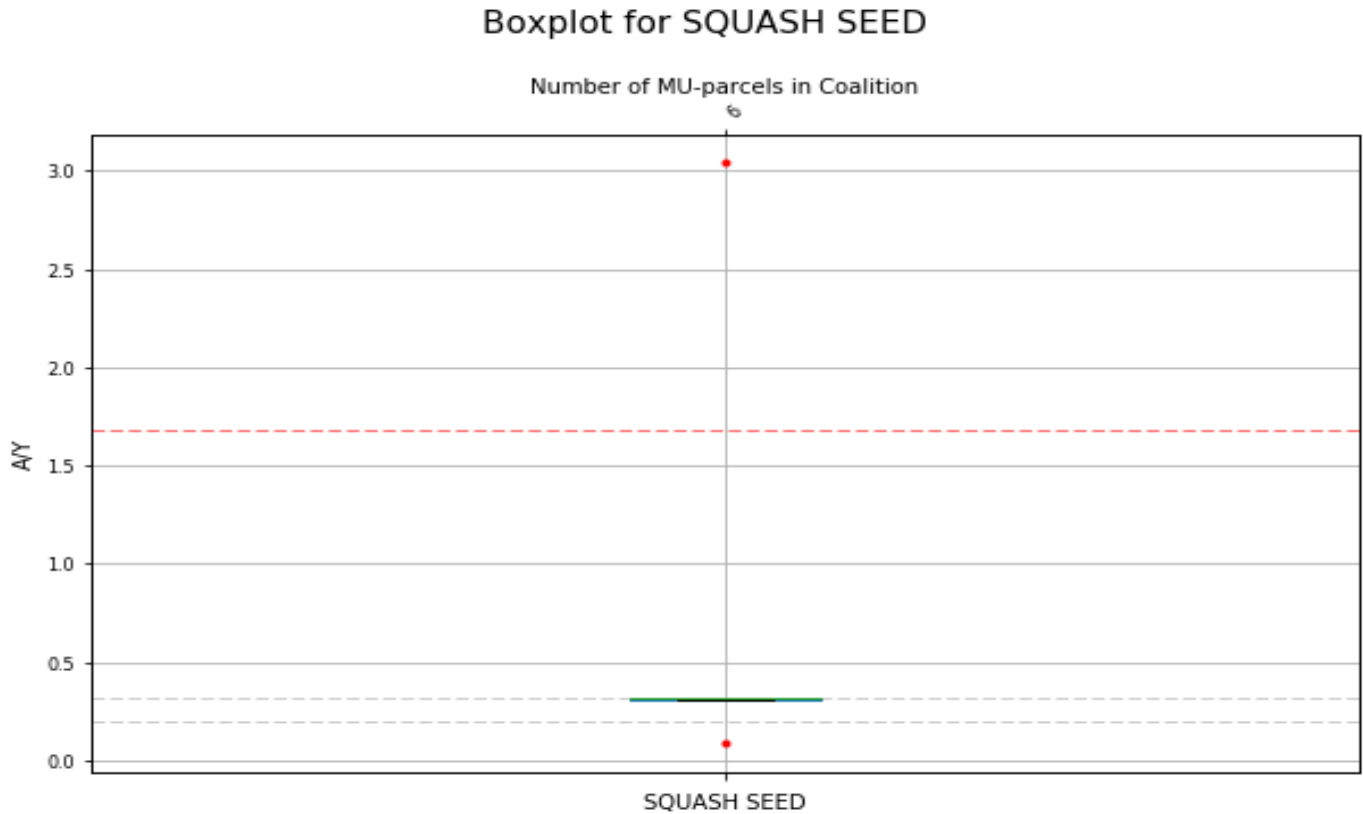
Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XXXI. SQUASH SEED

**Figure XXXI-1. Box and Whisker plots of A/Y for SQUASH SEED management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



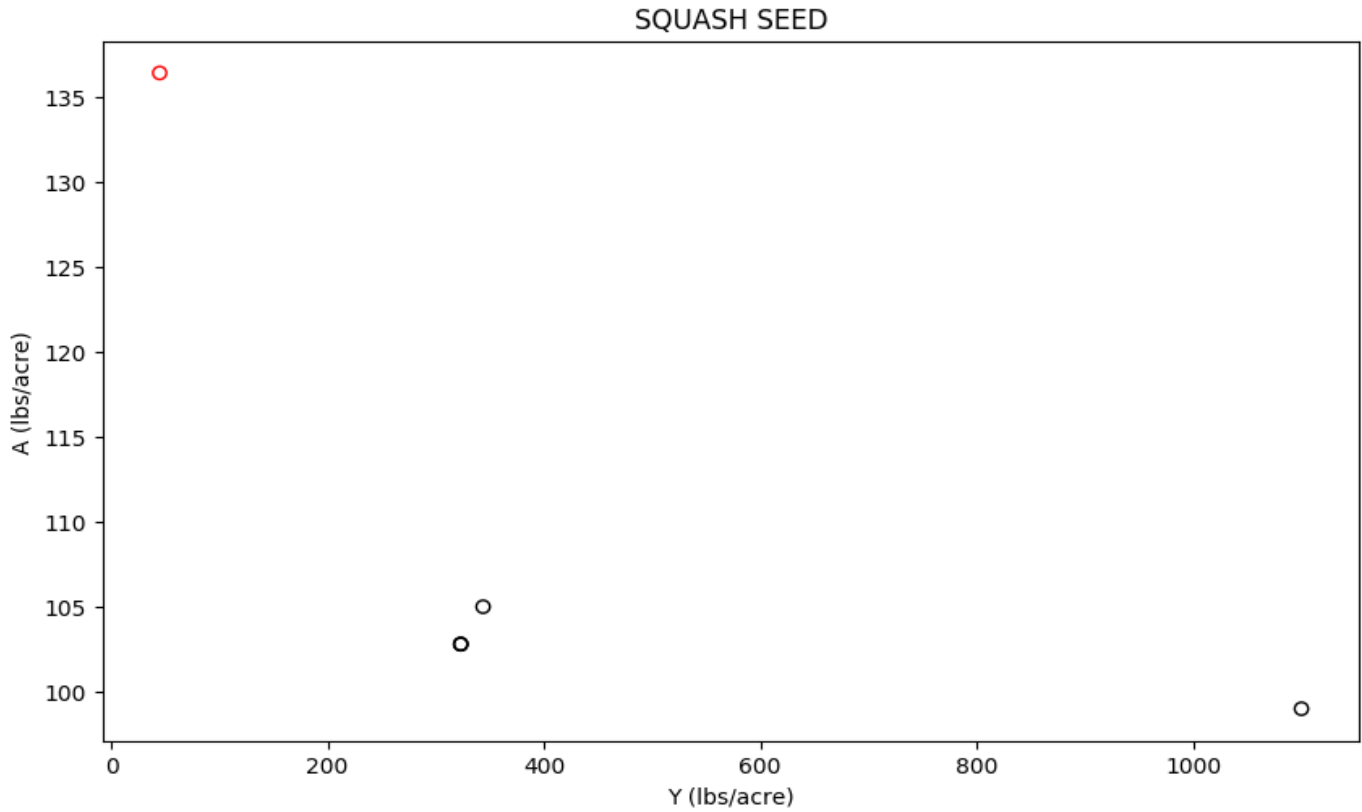
**Table XXXI-1. A/Y Summary Statistics for SQUASH SEED management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
6	0.09	3.039	0.1977	0.3087	0.3182	0.3182	1.6786	2

**Figure XXXI-2. Scatter plot of A vs. Y for SQUASH SEED with all T-R together.**

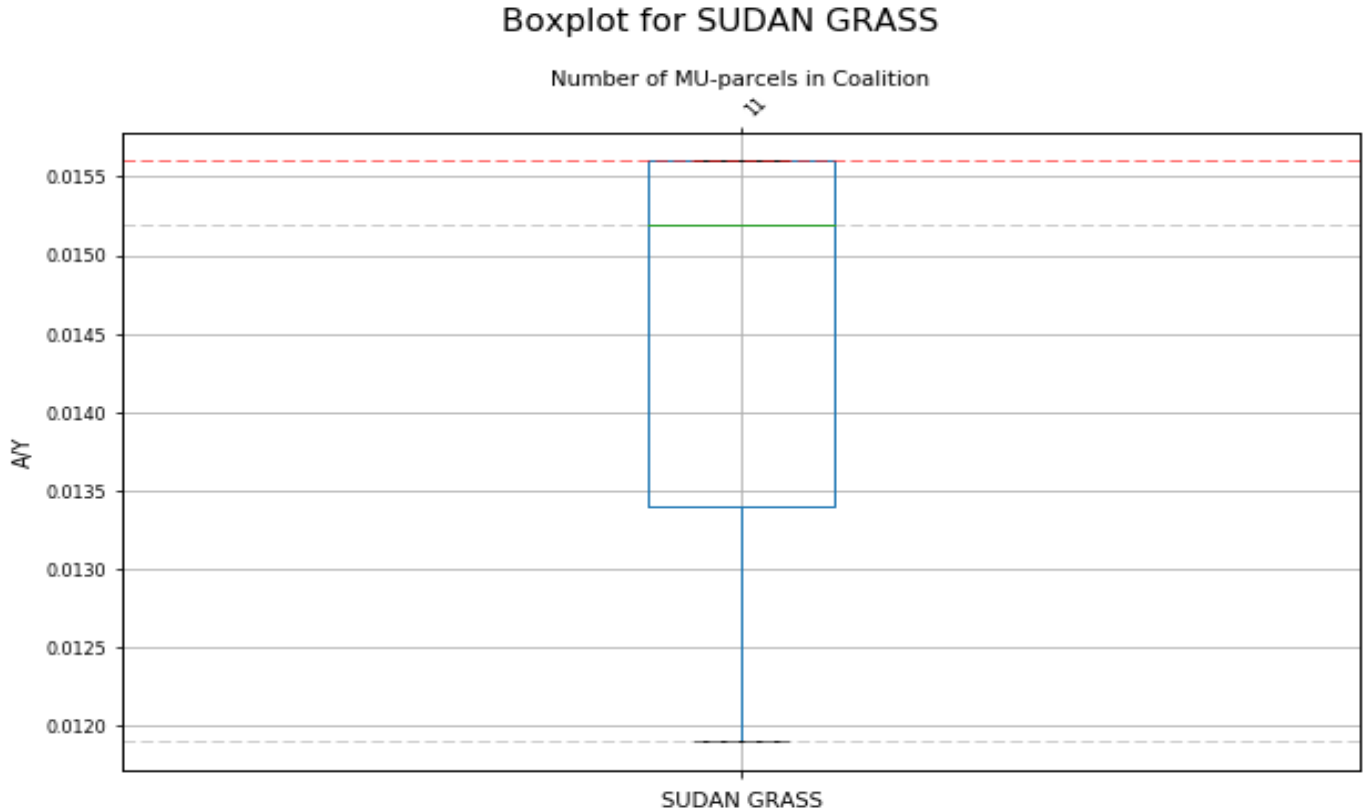
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XXXII. SUDAN GRASS

**Figure XXXII-1. Box and Whisker plots of A/Y for SUDAN GRASS management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



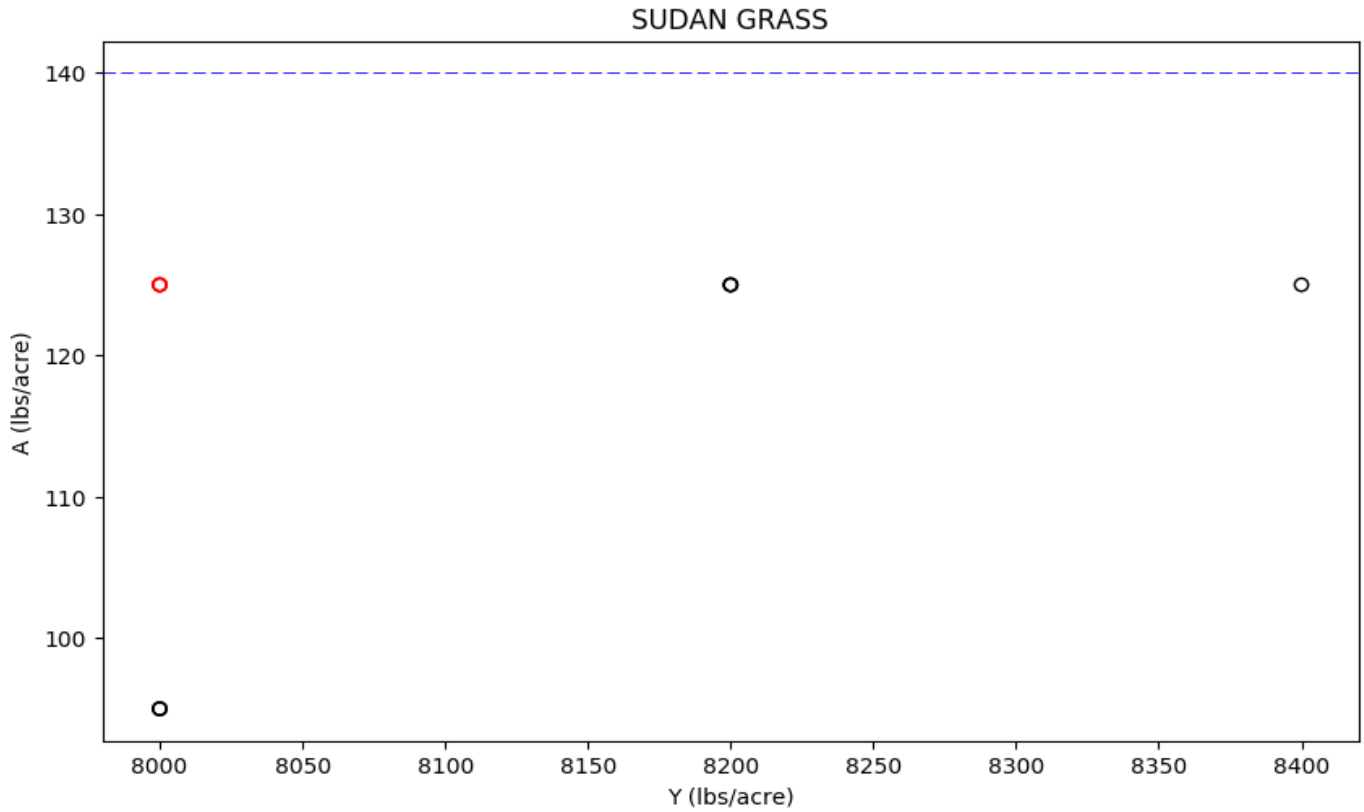
**Table XXXII-1. A/Y Summary Statistics for SUDAN GRASS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
11	0.0119	0.0156	0.0119	0.0134	0.0152	0.0156	0.0156	0

**Figure XXXII-2. Scatter plot of A vs. Y for SUDAN GRASS with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.





**Table XXXIII-1. A/Y Summary Statistics for SUNFLOWER management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
06N01W	4	0.0883	0.1267	0.0944	0.1036	0.1087	0.1132	0.1213	2
07N01E	14	0.0902	0.1803	0.1151	0.1279	0.1375	0.1381	0.1607	4
07N01W	1	0.0625	0.0625						
07N02E	36	0.024	0.1312	0.0372	0.0435	0.0543	0.0686	0.1084	6
07N03E	4	0.0533	0.0863	0.0592	0.0682	0.0792	0.0855	0.086	2
08N01E	12	0.0474	0.1855	0.0474	0.0522	0.111	0.1312	0.156	2
08N02E	33	0.0378	0.1552	0.0429	0.0451	0.0547	0.0635	0.0737	8
08N03E	1	0.0533	0.0533						
09N01E	6	0.06	0.1333	0.065	0.0725	0.085	0.09	0.1116	2
09N02E	29	0.0283	0.2533	0.0466	0.0635	0.1	0.1	0.1227	6
09N03E	3	0.0533	0.0533	0.0533	0.0533	0.0533	0.0533	0.0533	0
10N01E	5	0.06	0.17	0.0628	0.067	0.067	0.067	0.1288	2
10N02E	18	0.0435	0.18	0.0544	0.059	0.065	0.09	0.124	4
10N02W	1	0.17	0.17						
10N03E	7	0.0533	0.0867	0.0533	0.0566	0.067	0.0735	0.0827	1
11N01E	1	0.0663	0.0663						
11N02E	4	0.059	0.1	0.059	0.059	0.0795	0.1	0.1	0
11N03E	13	0.0375	0.2093	0.0434	0.075	0.078	0.0816	0.0963	4
12N01W	2	0.0635	0.186	0.0758	0.0941	0.1248	0.1554	0.1737	2
12N02E	14	0.033	0.089	0.0409	0.0593	0.06	0.0764	0.083	3
13N02E	2	0.078	0.09	0.0792	0.081	0.084	0.087	0.0888	2
14N01W	6	0.0625	0.09	0.0688	0.0752	0.076	0.076	0.083	2
15N01W	8	0.0523	0.1687	0.0619	0.066	0.0872	0.1687	0.1687	1
15N02W	1	0.1111	0.1111						
15N03W	1	0.1111	0.1111						
16N02W	3	0.1433	0.1433	0.1433	0.1433	0.1433	0.1433	0.1433	0
17N01W	5	0.073	0.088	0.079	0.088	0.088	0.088	0.088	1
17N02W	1	0.13	0.13						
17N03W	1	0.0435	0.0435						
18N01W	6	0.0667	1.0	0.5334	1.0	1.0	1.0	1.0	1
19N01W	1	0.0833	0.0833						
20N01W	1	0.028	0.028						
20N02W	1	0.03	0.03						
21N01E	1	0.08	0.08						
21N01W	1	0.028	0.028						

<b>T-R</b>	<b>No. MU-parcels</b>	<b>Min</b>	<b>Max</b>	<b>10%</b>	<b>25%</b>	<b>50%</b>	<b>75%</b>	<b>90%</b>	<b>No. Outliers</b>
Unknown	1	0.0522	0.0522						



**Table XXXIII-2. A/R Summary Statistics for SUNFLOWER management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
06N01W	4	3.2656	4.6844	3.4914	3.8301	4.0183	4.1848	4.4846	2
07N01E	14	3.3348	6.6668	4.2532	4.7288	5.085	5.1069	5.9402	4
07N01W	1	2.3105	2.3105						
07N02E	36	0.8871	4.8512	1.3752	1.6069	2.0077	2.5364	4.0083	6
07N03E	4	1.9717	3.1885	2.1912	2.5204	2.9258	3.1583	3.1764	2
08N01E	12	1.7535	6.8573	1.7535	1.9288	4.1017	4.8508	5.7673	2
08N02E	33	1.3959	5.7363	1.5831	1.6676	2.024	2.3493	2.7222	8
08N03E	1	1.9717	1.9717						
09N01E	6	2.2181	4.9291	2.403	2.6802	3.1424	3.3272	4.1282	2
09N02E	29	1.0474	9.3654	1.7227	2.3482	3.6969	3.6969	4.5348	6
09N03E	3	1.9704	1.9704	1.9704	1.9704	1.9704	1.9704	1.9704	0
10N01E	5	2.2181	6.2847	2.3216	2.4769	2.4769	2.4769	4.7616	2
10N02E	18	0.0008	6.6543	1.5262	2.1799	2.403	3.3272	4.5841	4
10N02W	1	6.2847	6.2847						
10N03E	7	1.9704	3.2039	1.9704	2.0942	2.4769	2.7172	3.0561	1
11N01E	1	2.4522	2.4522						
11N02E	4	2.18	3.6969	2.18	2.18	2.9384	3.6969	3.6969	0
11N03E	13	1.386	7.7388	1.6042	2.773	2.884	3.018	3.5611	4
12N01W	2	2.3476	6.8752	2.8004	3.4795	4.6114	5.7433	6.4224	2
12N02E	14	1.22	3.29	1.5112	2.1907	2.2181	2.8265	3.068	3
13N02E	2	2.884	3.327	2.9283	2.9947	3.1055	3.2162	3.2827	2
14N01W	6	2.3105	3.3272	2.5416	2.7818	2.8096	2.8096	3.0684	2
15N01W	8	1.9325	6.2356	2.2877	2.4399	3.2238	6.2356	6.2356	1
15N02W	1	4.1072	4.1072						
15N03W	1	4.1072	4.1072						
16N02W	3	5.2989	5.2989	5.2989	5.2989	5.2989	5.2989	5.2989	0
17N01W	5	2.6987	3.2532	2.9205	3.2532	3.2532	3.2532	3.2532	1
17N02W	1	4.8059	4.8059						
17N03W	1	1.6073	1.6073						
18N01W	6	1.4233	2.4658	1.4233	1.4233	1.4233	1.7421	2.1571	1
19N01W	1	3.0807	3.0807						
20N01W	1	1.0351	1.0351						
20N02W	1	1.1091	1.1091						
21N01E	1	2.957	2.957						
21N01W	1	1.0351	1.0351						

<b>T-R</b>	<b>No. MU-parcels</b>	<b>Min</b>	<b>Max</b>	<b>10%</b>	<b>25%</b>	<b>50%</b>	<b>75%</b>	<b>90%</b>	<b>No. Outliers</b>
Unknown	1	1.93	1.93						

**Table XXXIII-3. A-R Summary Statistics for SUNFLOWER management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
06N01W	4	73.54	145.51	85.28	102.89	112.67	120.88	135.66	2
07N01E	14	106.19	137.67	107.78	107.78	108.28	116.49	121.47	3
07N01W	1	56.72	56.72						
07N02E	36	-18.22	148.47	-2.5	10.64	17.13	47.57	66.95	8
07N03E	4	39.42	78.25	48.77	62.78	73.05	76.21	77.43	2
08N01E	12	5.78	115.5	6.28	10.78	102.79	107.76	111.31	4
08N02E	33	-14.2	90.82	2.51	15.53	19.62	34.8	49.3	8
08N03E	1	39.42	39.42						
09N01E	6	44.15	87.68	48.31	53.82	62.75	70.45	79.55	2
09N02E	29	1.44	101.88	35.96	52.93	83.89	83.89	84.65	6
09N03E	3	39.4	39.4	39.4	39.4	39.4	39.4	39.4	0
10N01E	5	43.93	100.91	50.21	59.63	59.63	59.63	84.39	2
10N02E	18	-88274.3	101.97	-26451.54	50.08	70.46	83.89	99.14	4
10N02W	1	113.52	113.52						
10N03E	7	32.95	75.67	36.82	39.4	60.56	62.61	67.83	2
11N01E	1	65.91	65.91						
11N02E	4	49.4	83.89	49.4	49.4	66.65	83.89	83.89	0
11N03E	13	25.1	87.51	32.16	60.4	62.61	76.7	84.7	4
12N01W	2	52.81	78.62	55.39	59.26	65.71	72.17	76.04	2
12N02E	14	14.26	90.5	25.06	50.73	52.45	61.48	87.6	3
13N02E	2	81.1	84.9	81.48	82.05	83.0	83.95	84.52	2
14N01W	6	48.0	70.0	52.36	57.79	61.0	61.0	65.5	2
15N01W	8	60.0	124.0	62.1	63.0	71.0	124.0	124.0	1
15N02W	1	76.0	76.0						
15N03W	1	76.0	76.0						
16N02W	3	99.0	99.0	99.0	99.0	99.0	99.0	99.0	0
17N01W	5	46.4	76.0	58.24	76.0	76.0	76.0	76.0	1
17N02W	1	103.0	103.0						
17N03W	1	19.0	19.0						
18N01W	6	28.0	59.0	31.25	34.5	34.5	34.5	46.75	2
19N01W	1	68.0	68.0						
20N01W	1	4.0	4.0						
20N02W	1	15.0	15.0						
21N01E	1	79.4	79.4						
21N01W	1	4.0	4.0						

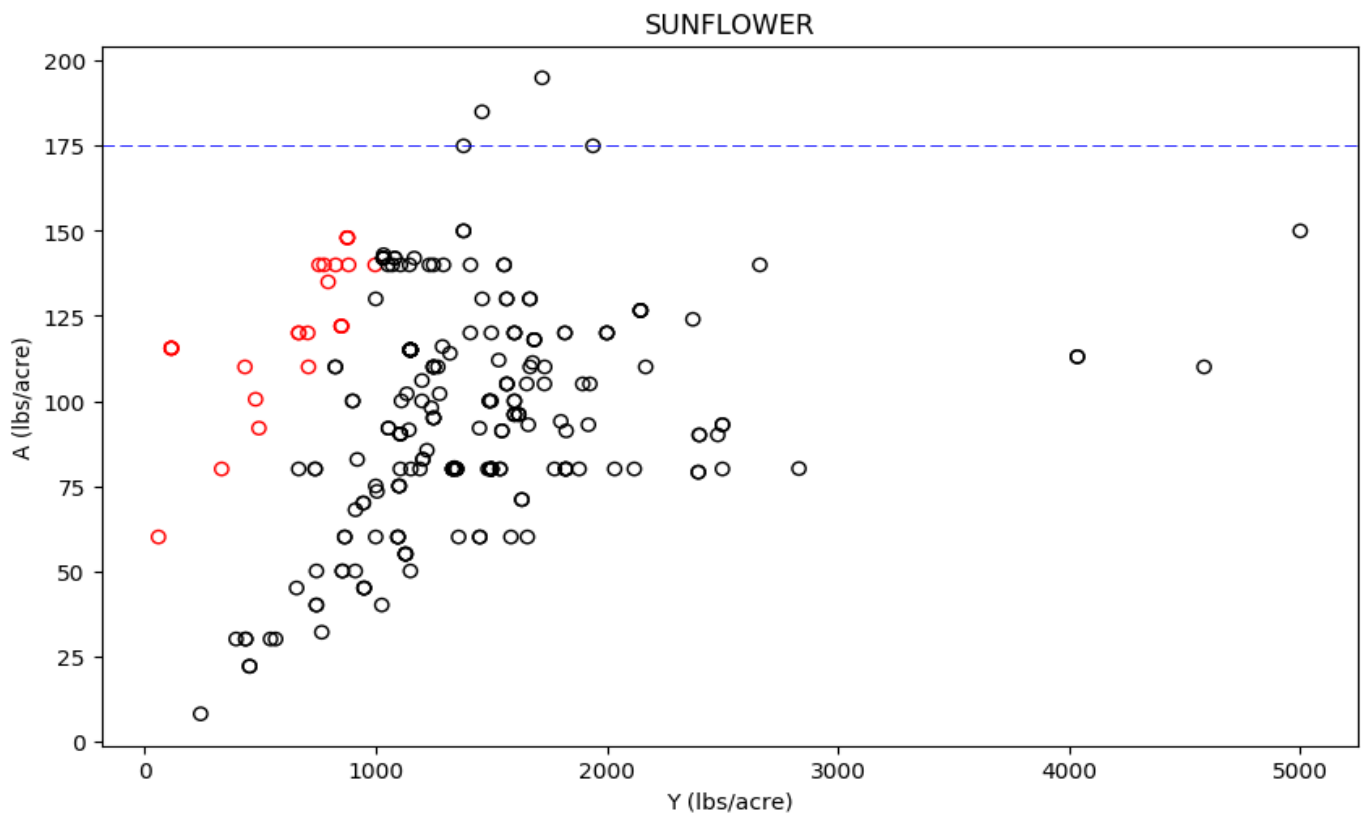
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
Unknown	1	45.3	45.3						

**Table XXXIII-4. Summary Statistics for SUNFLOWER management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	248	0.024	1.0	0.0435	0.0544	0.0693	0.1	0.1389	48
A/R	248	0.0008	9.3654	1.5069	1.9732	2.5331	3.6969	5.085	46
A-R	248	-88274.3	148.47	10.78	27.91	59.81	83.89	107.78	41

**Figure XXXIII-2. Scatter plot of A vs. Y for SUNFLOWER with all T-R together.**

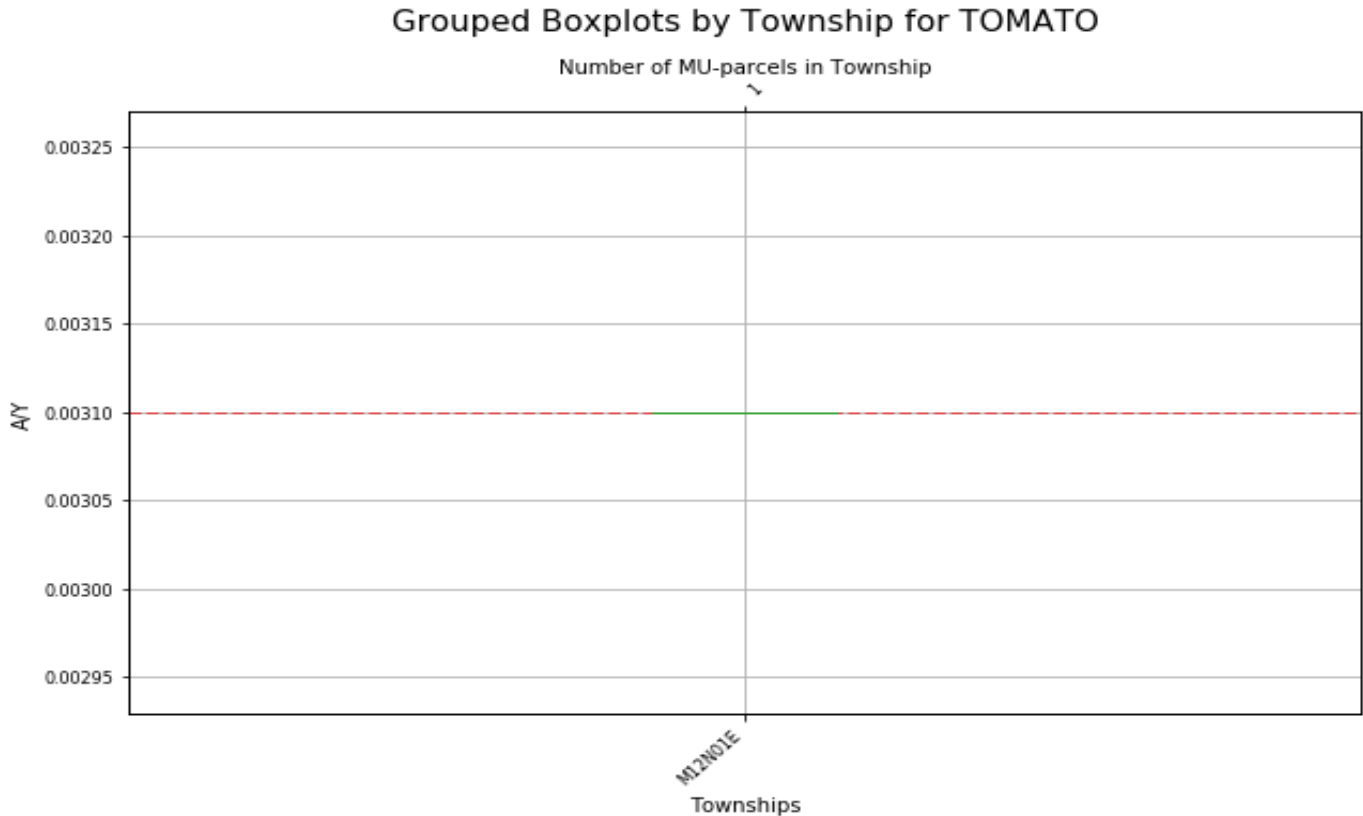
Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XXXIV. TOMATO

**Figure XXXIV-1. Box and Whisker plots of A/Y for TOMATO management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XXXIV-1. A/Y Summary Statistics for TOMATO management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
12N01E	1	0.0031	0.0031						

**Table XXXIV-2. A/R Summary Statistics for TOMATO management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers

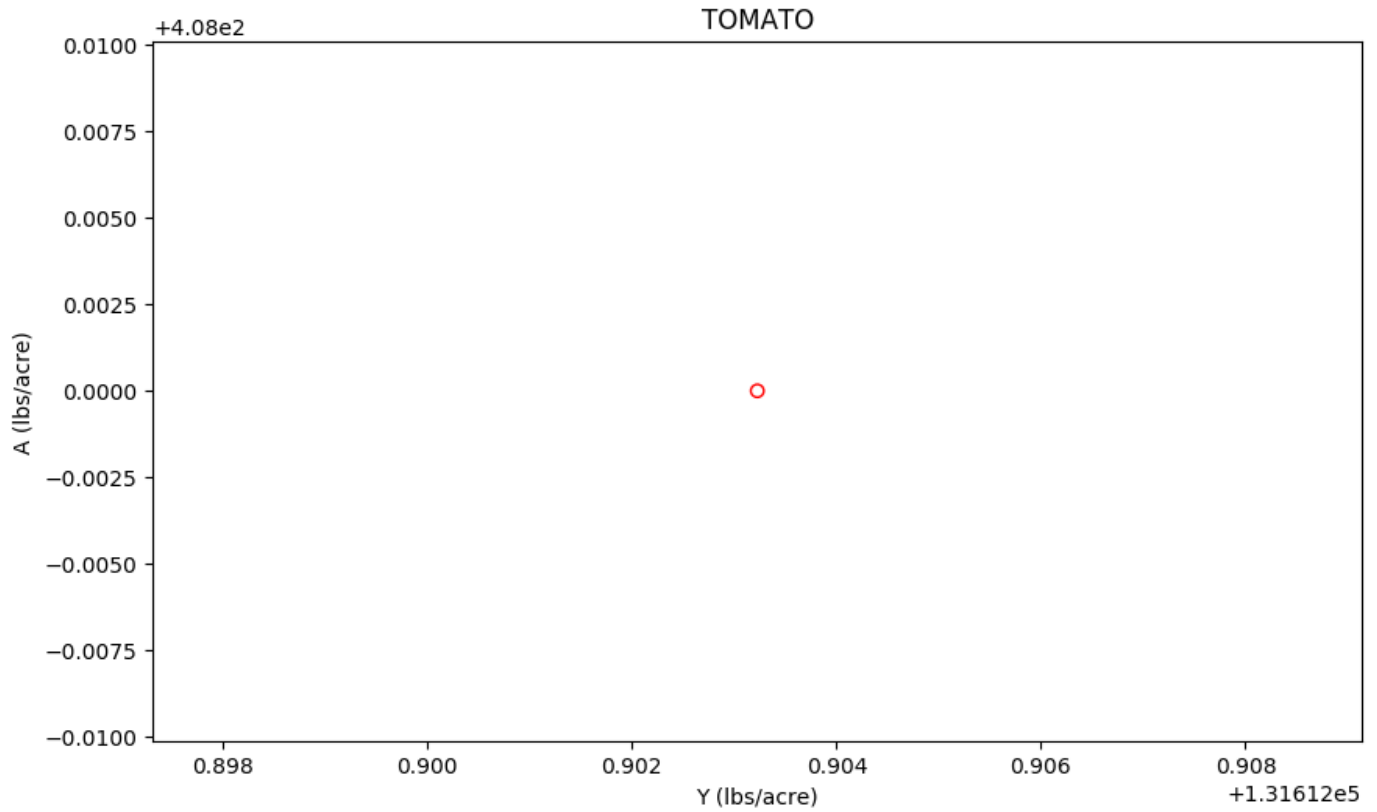
**Table XXXIV-3. A-R Summary Statistics for TOMATO management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
12N01E	1	227.69	227.69						

**Figure XXXIV-2. Scatter plot of A vs. Y for TOMATO with all T-R together.**

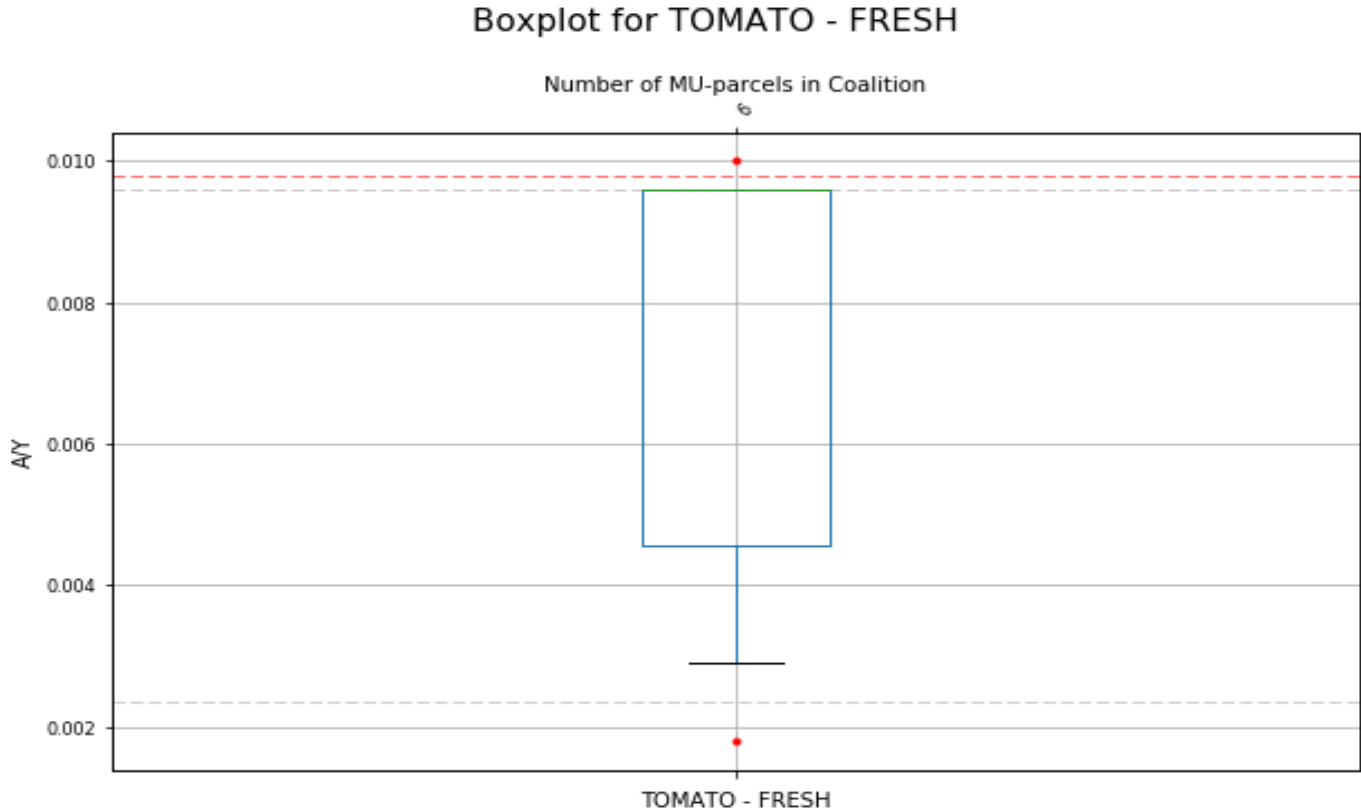
Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XXXV. TOMATO - FRESH

**Figure XXXV-1. Box and Whisker plots of A/Y for TOMATO - FRESH management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XXXV-1. A/Y Summary Statistics for TOMATO - FRESH management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
6	0.0018	0.01	0.0023	0.0046	0.0096	0.0096	0.0098	2

**Table XXXV-2. A/R Summary Statistics for TOMATO - FRESH management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
6	1.393	7.6336	1.8035	3.4925	7.3282	7.3282	7.4809	2

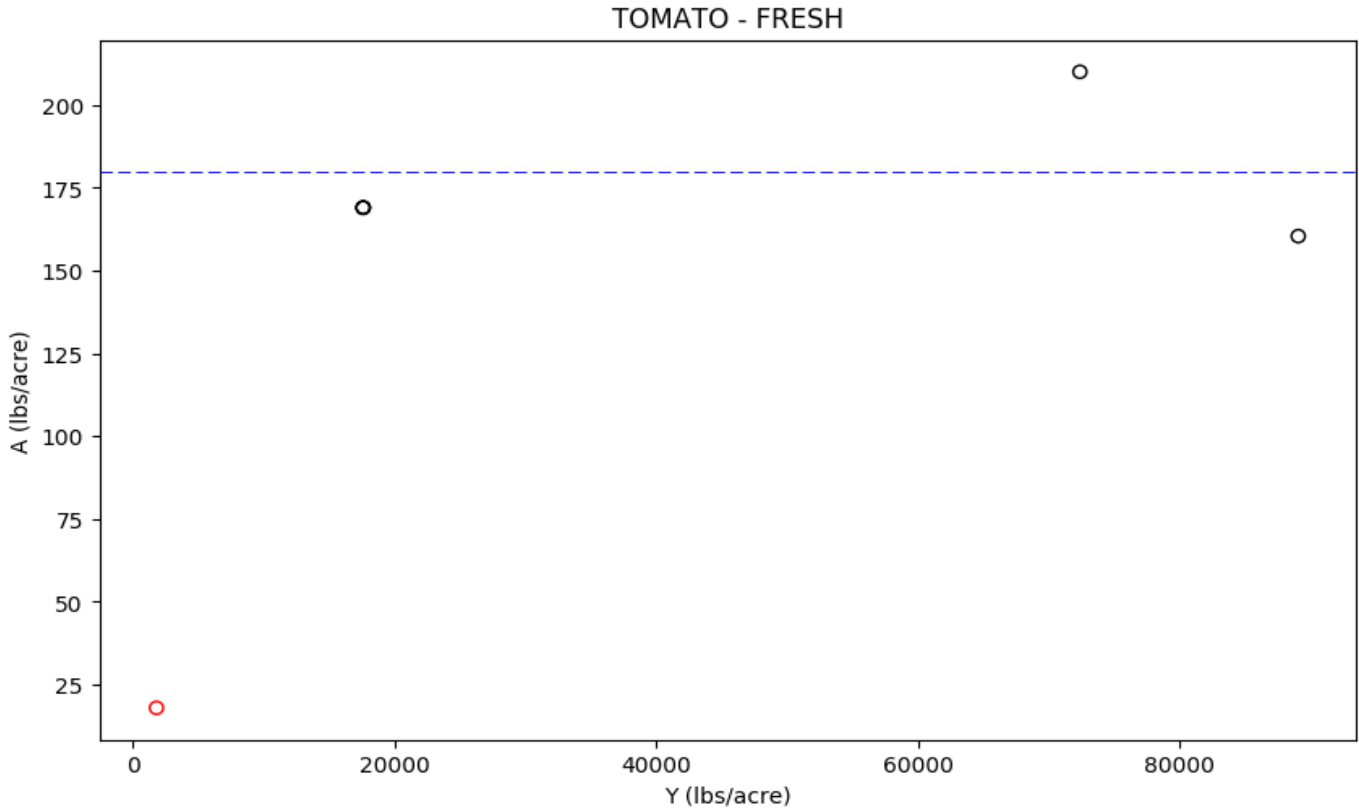
**Table XXXV-3. A-R Summary Statistics for TOMATO - FRESH management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
6	15.64	145.94	30.47	62.75	130.52	145.94	145.94	1

**Figure XXXV-2. Scatter plot of A vs. Y for TOMATO - FRESH with all T-R together.**

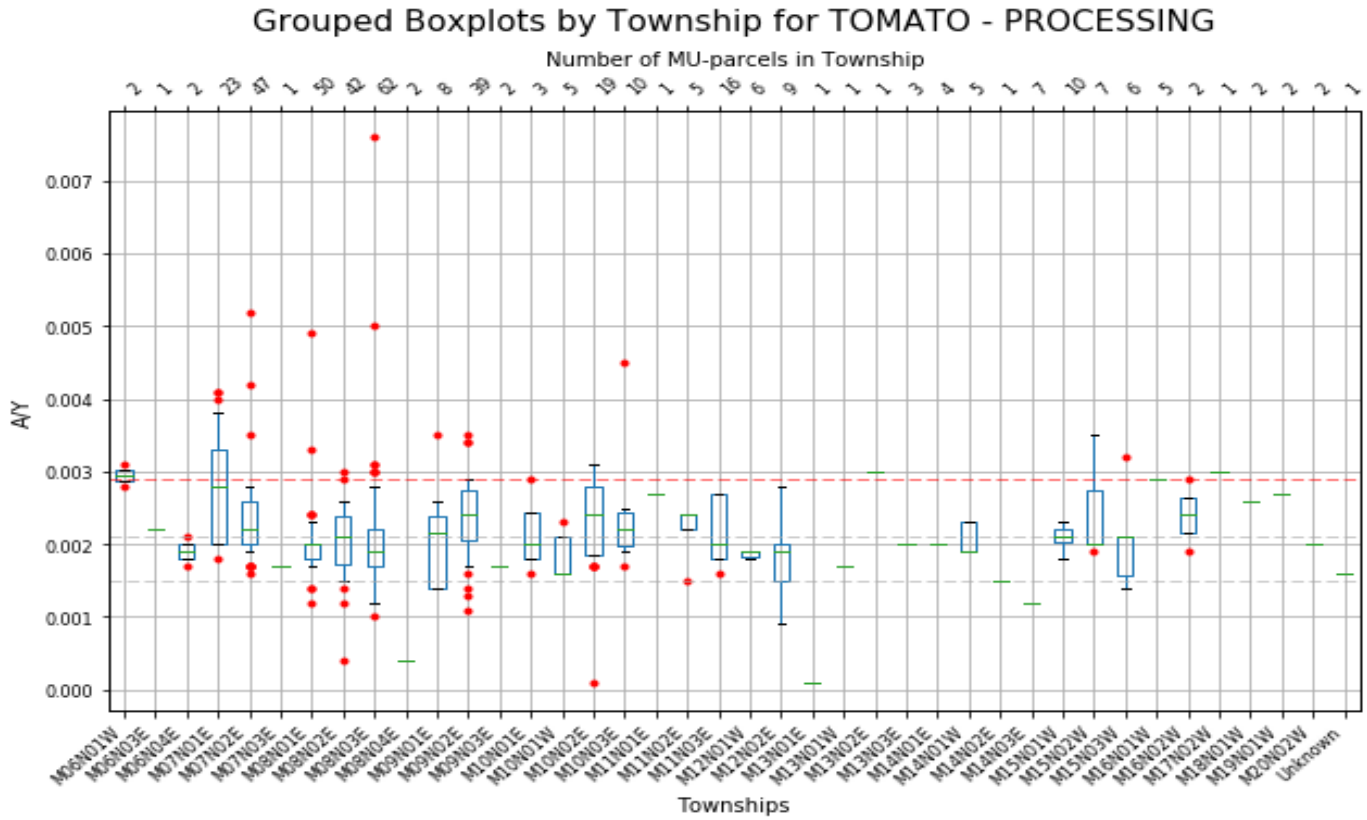
Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.





# XXXVI. TOMATO - PROCESSING

**Figure XXXVI-1. Box and Whisker plots of A/Y for TOMATO - PROCESSING management units grouped by T-R.** Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XXXVI-1. A/Y Summary Statistics for TOMATO - PROCESSING management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
06N01W	2	0.0028	0.0031	0.0028	0.0029	0.003	0.003	0.0031	2
06N03E	1	0.0022	0.0022						
06N04E	2	0.0017	0.0021	0.0017	0.0018	0.0019	0.002	0.0021	2
07N01E	23	0.0018	0.0041	0.002	0.002	0.0028	0.0033	0.004	4
07N02E	47	0.0016	0.0052	0.0017	0.002	0.0022	0.0026	0.0028	9
07N03E	1	0.0017	0.0017						
08N01E	50	0.0012	0.0049	0.0017	0.0018	0.002	0.002	0.0023	8
08N02E	42	0.0004	0.003	0.0015	0.0017	0.0021	0.0024	0.0026	5
08N03E	62	0.001	0.0076	0.0012	0.0017	0.0019	0.0022	0.003	8
08N04E	2	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0
09N01E	8	0.0014	0.0035	0.0014	0.0014	0.0022	0.0024	0.0029	1
09N02E	39	0.0011	0.0035	0.0017	0.002	0.0024	0.0028	0.0029	7
09N03E	2	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0
10N01E	3	0.0016	0.0029	0.0017	0.0018	0.002	0.0024	0.0027	2
10N01W	5	0.0016	0.0023	0.0016	0.0016	0.0016	0.0021	0.0022	1
10N02E	19	0.0001	0.0031	0.0017	0.0018	0.0024	0.0028	0.0031	5
10N03E	10	0.0017	0.0045	0.0019	0.002	0.0022	0.0024	0.0027	2
11N01E	1	0.0027	0.0027						
11N02E	5	0.0015	0.0024	0.0018	0.0022	0.0024	0.0024	0.0024	1
11N03E	16	0.0016	0.0027	0.0018	0.0018	0.002	0.0027	0.0027	1
12N01W	6	0.0018	0.0019	0.0018	0.0018	0.0019	0.0019	0.0019	0
12N02E	9	0.0009	0.0028	0.0009	0.0015	0.0019	0.002	0.0028	0
13N01E	1	0.0001	0.0001						
13N01W	1	0.0017	0.0017						
13N02E	1	0.003	0.003						
13N03E	3	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0
14N01E	4	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0
14N01W	5	0.0019	0.0023	0.0019	0.0019	0.0019	0.0023	0.0023	0
14N02E	1	0.0015	0.0015						
14N03E	7	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0
15N01W	10	0.0018	0.0023	0.0018	0.002	0.0021	0.0022	0.0023	0
15N02W	7	0.0019	0.0035	0.002	0.002	0.002	0.0028	0.0035	1
15N03W	6	0.0014	0.0032	0.0014	0.0016	0.0021	0.0021	0.0026	1
16N01W	5	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0
16N02W	2	0.0019	0.0029	0.002	0.0022	0.0024	0.0026	0.0028	2

<b>T-R</b>	<b>No. MU-parcels</b>	<b>Min</b>	<b>Max</b>	<b>10%</b>	<b>25%</b>	<b>50%</b>	<b>75%</b>	<b>90%</b>	<b>No. Outliers</b>
17N02W	1	0.003	0.003						
18N01W	2	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0
19N01W	2	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0
20N02W	2	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0
Unknown	1	0.0016	0.0016						

**Table XXXVI-2. A/R Summary Statistics for TOMATO - PROCESSING management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
06N01W	2	2.0157	2.2754	2.0417	2.0806	2.1456	2.2105	2.2494	2
06N03E	1	1.5967	1.5967						
06N04E	2	1.2153	1.5511	1.2489	1.2992	1.3832	1.4672	1.5175	2
07N01E	23	1.3074	2.9864	1.4348	1.4348	2.0077	2.4305	2.9034	4
07N02E	47	1.1903	3.7621	1.257	1.476	1.6207	1.8786	2.0655	7
07N03E	1	1.2165	1.2165						
08N01E	50	0.9065	3.5441	1.2437	1.3011	1.4344	1.485	1.7158	9
08N02E	42	0.3102	2.2258	1.0777	1.2757	1.5288	1.7343	1.8894	10
08N03E	62	0.7628	5.5146	0.9088	1.2664	1.4197	1.5986	2.1526	11
08N04E	2	0.2591	0.2591	0.2591	0.2591	0.2591	0.2591	0.2591	0
09N01E	8	0.9927	2.562	0.9927	0.9927	1.5748	1.7518	2.0792	1
09N02E	39	0.7664	2.537	1.2194	1.5	1.7518	2.011	2.1343	8
09N03E	2	1.2737	1.2737	1.2737	1.2737	1.2737	1.2737	1.2737	0
10N01E	3	1.1387	2.1168	1.1964	1.2828	1.427	1.7719	1.9788	2
10N01W	5	1.1387	1.6606	1.1387	1.1387	1.1387	1.5219	1.6051	1
10N02E	19	0.0876	2.2628	1.2482	1.3687	1.7518	2.0255	2.2628	1
10N03E	10	1.2555	3.2847	1.3967	1.4635	1.6168	1.7728	1.9708	2
11N01E	1	1.938	1.938						
11N02E	5	1.1168	1.7518	1.3168	1.6168	1.7518	1.7518	1.7518	1
11N03E	16	1.146	1.978	1.292	1.292	1.4544	1.978	1.978	1
12N01W	6	1.2774	1.3869	1.2847	1.3157	1.3869	1.3869	1.3869	1
12N02E	9	0.6474	2.073	0.6474	1.062	1.387	1.46	2.041	1
13N01E	1	0.0989	0.0989						
13N01W	1	1.2409	1.2409						
13N02E	1	2.19	2.19						
13N03E	3	1.46	1.46	1.46	1.46	1.46	1.46	1.46	0
14N01E	4	1.4599	1.4599	1.4599	1.4599	1.4599	1.4599	1.4599	0
14N01W	5	1.3671	1.7011	1.3671	1.3671	1.3671	1.7011	1.7011	0
14N02E	1	1.064	1.064						
14N03E	7	0.869	0.869	0.869	0.869	0.869	0.869	0.869	0
15N01W	10	1.2914	1.6616	1.2914	1.4745	1.5182	1.6149	1.6616	0
15N02W	7	1.3671	2.5304	1.4128	1.4432	1.4432	1.9868	2.5304	1
15N03W	6	1.0138	2.3723	1.0333	1.166	1.5055	1.5055	1.9389	2
16N01W	5	2.1468	2.1468	2.1468	2.1468	2.1468	2.1468	2.1468	0
16N02W	2	1.3905	2.1468	1.4661	1.5796	1.7686	1.9577	2.0712	2

<b>T-R</b>	<b>No. MU-parcels</b>	<b>Min</b>	<b>Max</b>	<b>10%</b>	<b>25%</b>	<b>50%</b>	<b>75%</b>	<b>90%</b>	<b>No. Outliers</b>
17N02W	1	2.1898	2.1898						
18N01W	2	1.9197	1.9197	1.9197	1.9197	1.9197	1.9197	1.9197	0
19N01W	2	1.9465	1.9465	1.9465	1.9465	1.9465	1.9465	1.9465	0
20N02W	2	1.4599	1.4599	1.4599	1.4599	1.4599	1.4599	1.4599	0
Unknown	1	1.146	1.146						

**Table XXXVI-3. A-R Summary Statistics for TOMATO - PROCESSING management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
06N01W	2	128.49	142.93	129.94	132.1	135.71	139.32	141.49	2
06N03E	1	65.4	65.4						
06N04E	2	35.44	71.06	39.0	44.34	53.25	62.15	67.5	2
07N01E	23	48.07	171.17	48.07	51.78	112.93	150.0	167.56	3
07N02E	47	6.26	202.01	17.94	25.57	50.92	84.88	122.58	9
07N03E	1	24.92	24.92						
08N01E	50	-20.32	190.81	10.31	24.76	39.22	54.56	60.57	10
08N02E	42	-494.77	82.05	-13.86	13.69	30.49	53.01	68.38	10
08N03E	62	-58.47	122.8	-12.25	27.14	39.84	51.02	90.07	11
08N04E	2	-71.48	-71.48	-71.48	-71.48	-71.48	-71.48	-71.48	0
09N01E	8	-1.0	134.13	-1.0	-1.0	75.2	84.62	107.09	1
09N02E	39	-42.91	154.42	31.38	72.42	105.15	118.02	127.17	8
09N03E	2	39.76	39.76	39.76	39.76	39.76	39.76	39.76	0
10N01E	3	21.92	139.81	28.07	37.29	52.66	96.24	122.38	2
10N01W	5	21.92	99.45	21.92	21.92	21.92	85.73	93.96	1
10N02E	19	-86.56	227.69	38.77	52.23	118.02	154.42	227.69	1
10N03E	10	32.27	125.2	43.93	48.7	74.37	90.21	93.88	2
11N01E	1	141.95	141.95						
11N02E	5	16.77	118.02	45.92	89.65	118.02	118.02	118.02	1
11N03E	16	16.6	118.02	44.1	44.1	50.9	96.4	96.4	2
12N01W	6	49.94	64.16	50.96	55.02	64.16	64.16	64.16	1
12N02E	9	-43.57	132.5	-43.57	10.2	46.0	70.7	105.78	1
13N01E	1	-2095.46	-2095.46						
13N01W	1	36.4	36.4						
13N02E	1	105.9	105.9						
13N03E	3	73.26	73.26	73.26	73.26	73.26	73.26	73.26	0
14N01E	4	50.4	56.7	50.4	50.4	53.55	56.7	56.7	0
14N01W	5	59.34	91.08	59.34	59.34	59.34	91.08	91.08	0
14N02E	1	10.6	10.6						
14N03E	7	-33.5	-33.5	-33.5	-33.5	-33.5	-33.5	-33.5	0
15N01W	10	51.9	114.23	51.9	85.98	88.75	113.48	114.23	0
15N02W	7	55.86	188.7	55.86	55.86	55.86	124.02	188.7	0
15N03W	6	2.04	127.84	4.78	23.29	70.58	70.58	99.21	2
16N01W	5	160.26	160.26	160.26	160.26	160.26	160.26	160.26	0
16N02W	2	62.07	160.26	71.89	86.62	111.16	135.71	150.44	2

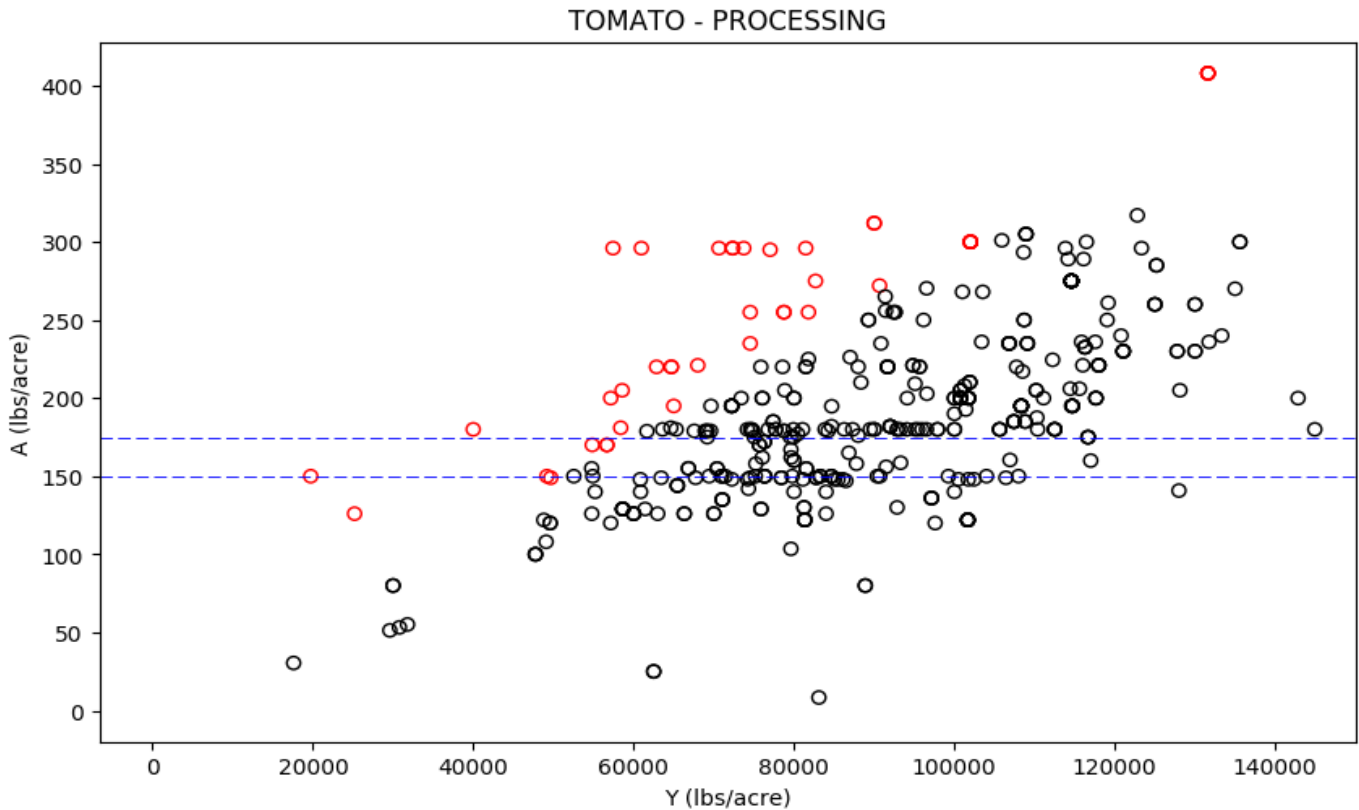
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
17N02W	1	147.79	147.79						
18N01W	2	95.82	95.82	95.82	95.82	95.82	95.82	95.82	0
19N01W	2	38.9	38.9	38.9	38.9	38.9	38.9	38.9	0
20N02W	2	81.9	81.9	81.9	81.9	81.9	81.9	81.9	0
Unknown	1	16.6	16.6						

**Table XXXVI-4. Summary Statistics for TOMATO - PROCESSING management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	416	0.0001	0.0076	0.0015	0.0018	0.0021	0.0024	0.0029	74
A/R	416	0.0876	5.5146	1.0849	1.2936	1.5118	1.7701	2.1468	79
A-R	416	-2095.46	227.69	6.33	30.02	52.23	93.48	128.32	84

**Figure XXXVI-2. Scatter plot of A vs. Y for TOMATO - PROCESSING with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.

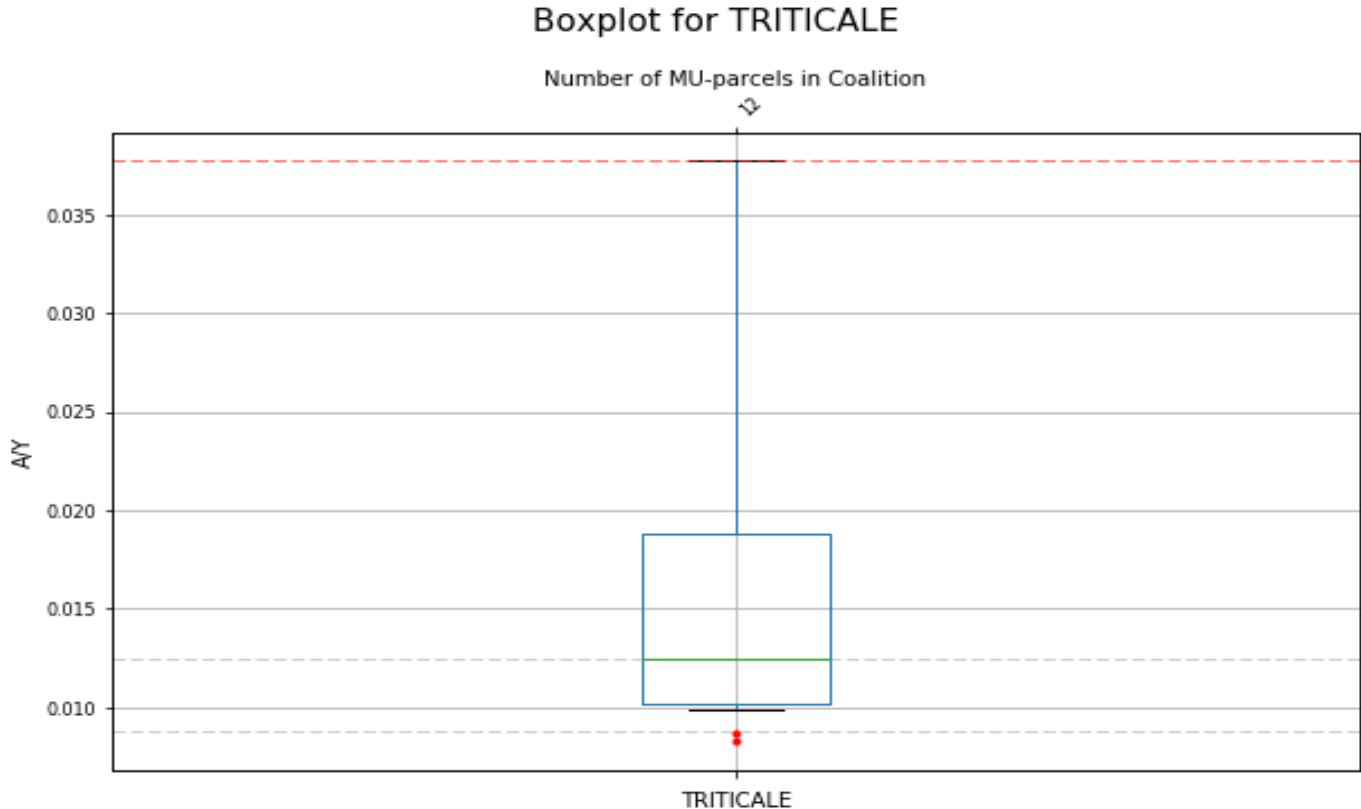


NOTE: 10 records above Yield value of 150000 lbs/acre not shown to avoid skewing of scatter plot

# XXXVII. TRITICALE

**Figure XXXVII-1. Box and Whisker plots of A/Y for TRITICALE management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XXXVII-1. A/Y Summary Statistics for TRITICALE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
12	0.0083	0.0377	0.0088	0.0102	0.0125	0.0188	0.0377	2

**Table XXXVII-2. A/R Summary Statistics for TRITICALE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
12	0.4109	1.8663	0.439	0.5061	0.6188	0.9307	1.8663	2



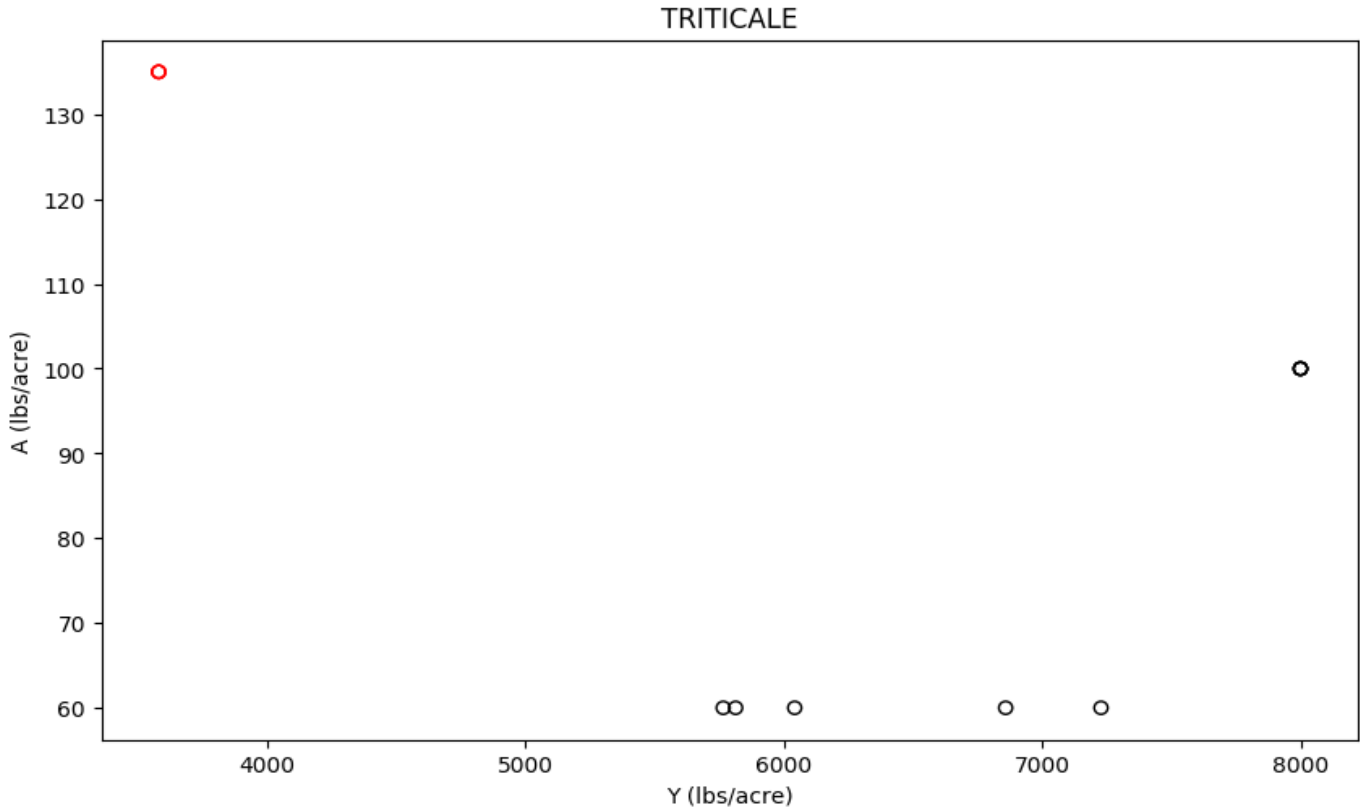
**Table XXXVII-3. A-R Summary Statistics for TRITICALE management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
12	-86.01	62.67	-76.9	-61.71	-61.6	-26.69	62.67	2

**Figure XXXVII-2. Scatter plot of A vs. Y for TRITICALE with all T-R together.**

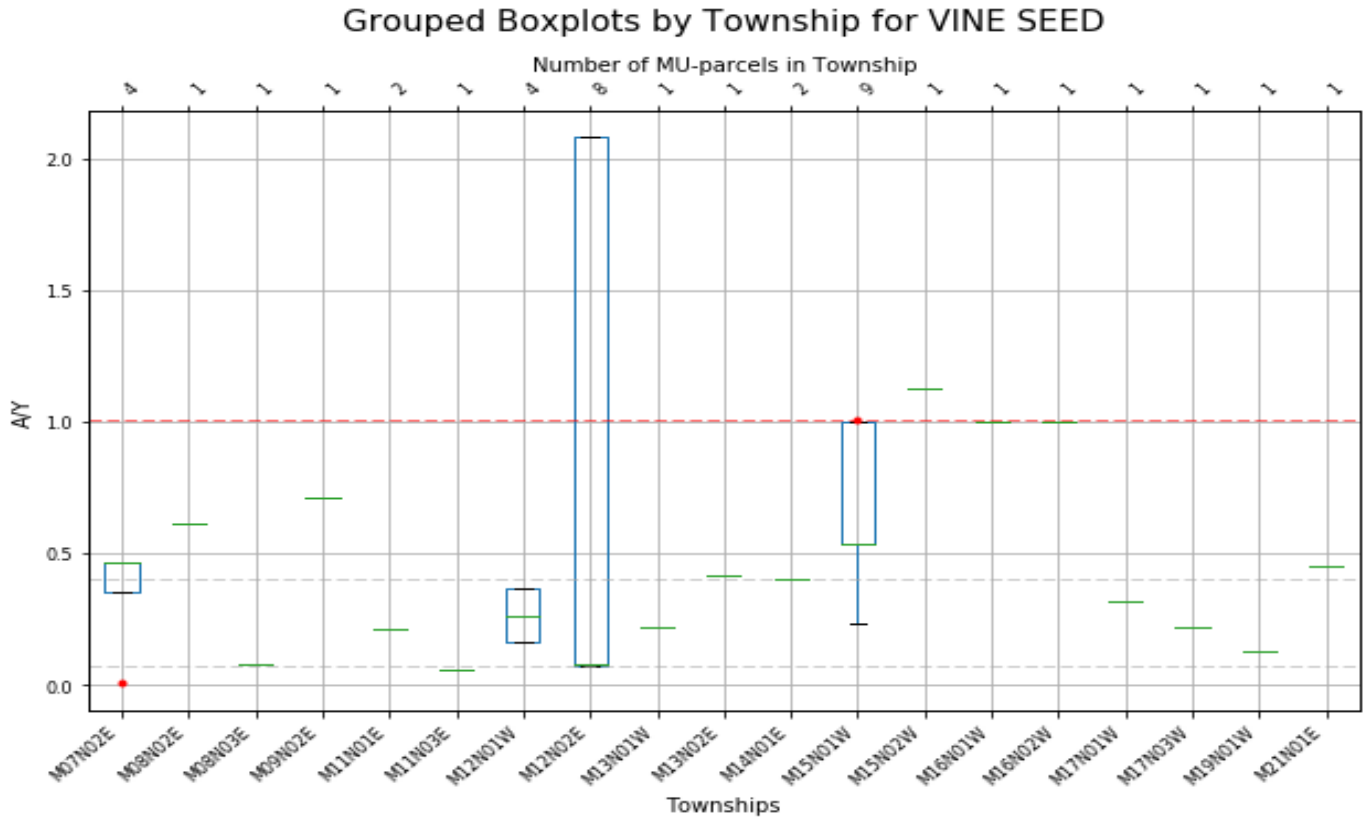
Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



# XXXVIII. VINE SEED

**Figure XXXVIII-1. Box and Whisker plots of A/Y for VINE SEED management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XXXVIII-1. A/Y Summary Statistics for VINE SEED management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

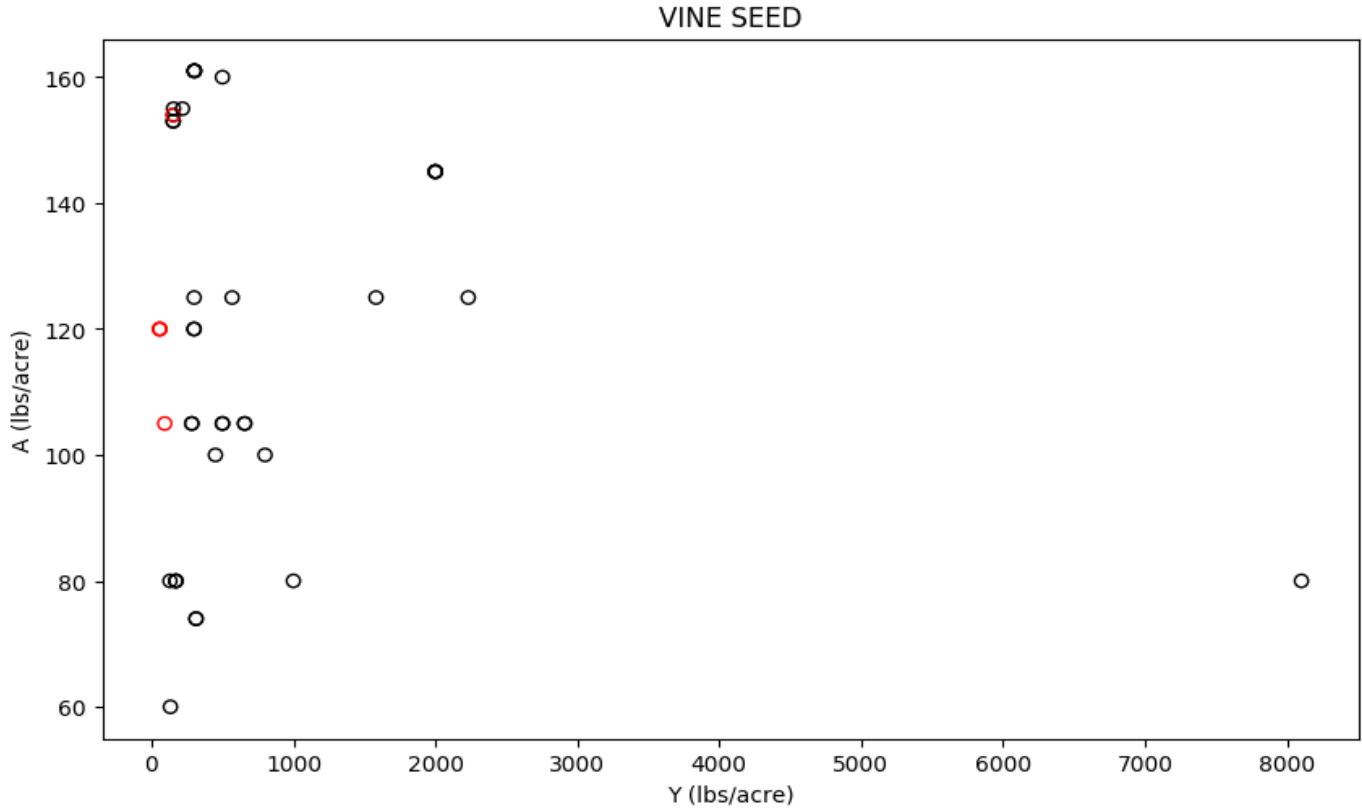
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
07N02E	4	0.0099	0.4663	0.1468	0.3522	0.4663	0.4663	0.4663	1
08N02E	1	0.6139	0.6139						
08N03E	1	0.08	0.08						
09N02E	1	0.71	0.71						
11N01E	2	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0
11N03E	1	0.056	0.056						
12N01W	4	0.16	0.37	0.16	0.16	0.265	0.37	0.37	0
12N02E	8	0.0725	2.08	0.0725	0.0725	0.0758	2.08	2.08	0
13N01W	1	0.22	0.22						
13N02E	1	0.416	0.416						
14N01E	2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0
15N01W	9	0.2357	1.0065	0.2357	0.5331	0.5331	1.0	1.0013	1
15N02W	1	1.129	1.129						
16N01W	1	1.0	1.0						
16N02W	1	1.0	1.0						
17N01W	1	0.32	0.32						
17N03W	1	0.222	0.222						
19N01W	1	0.125	0.125						
21N01E	1	0.45	0.45						

**Table XXXVIII-4. Summary Statistics for VINE SEED management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	42	0.0099	2.08	0.0725	0.1725	0.4	0.5937	1.0058	7

**Figure XXXVIII-2. Scatter plot of A vs. Y for VINE SEED with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



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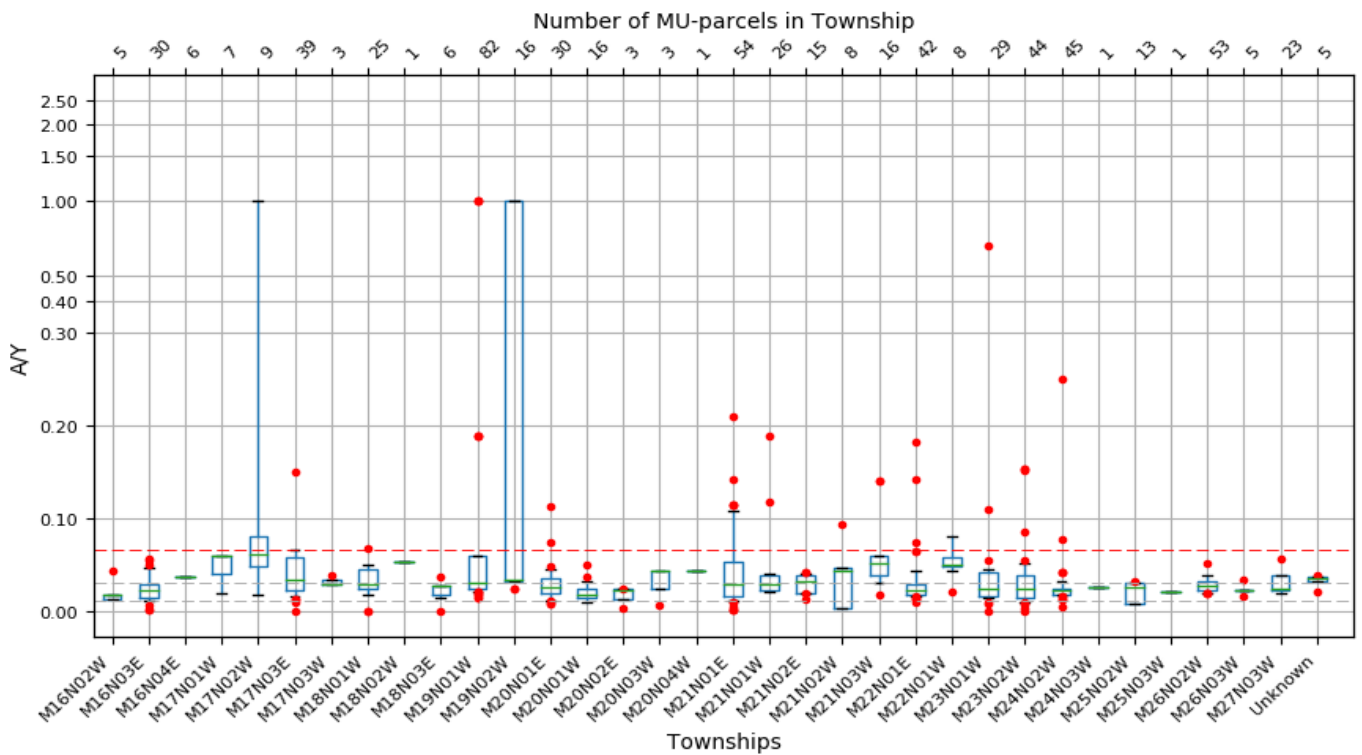
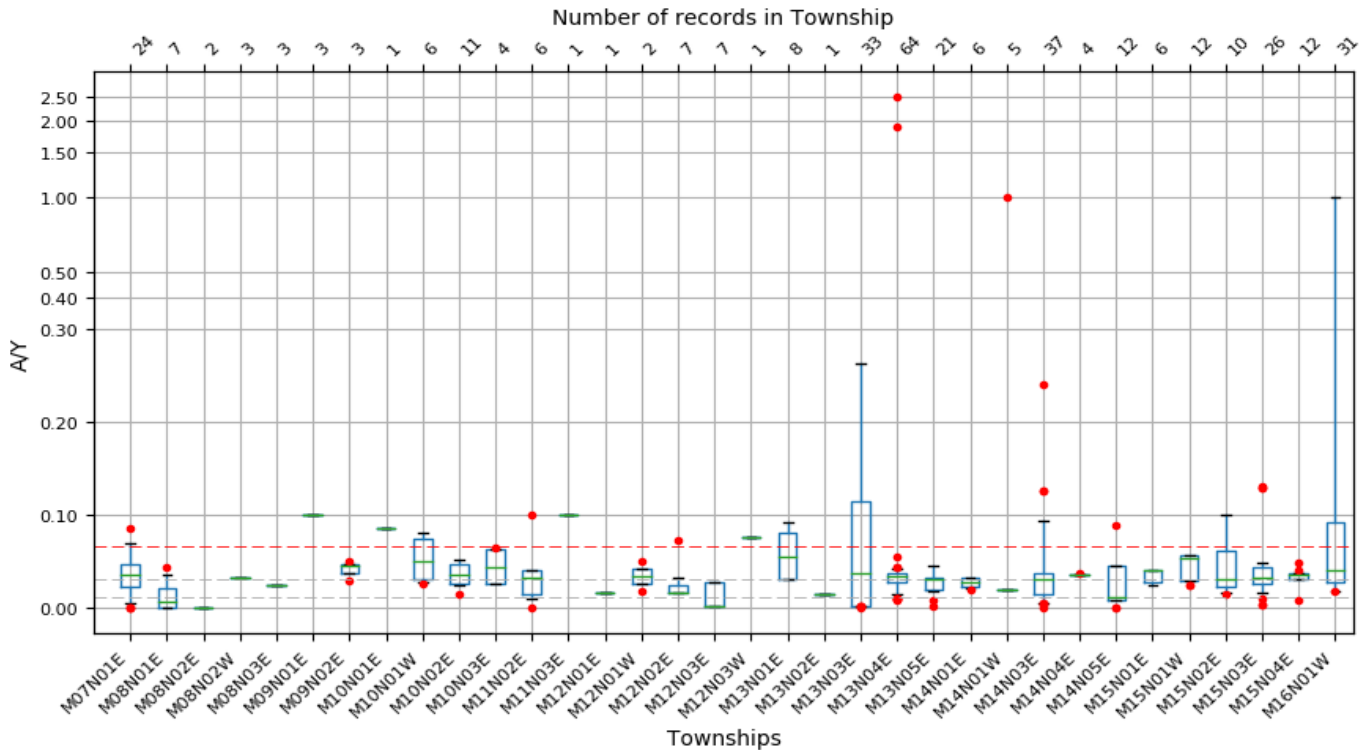
## XXXIX. WALNUTS

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**Figure XXXIX-1. Box and Whisker plots of A/Y for WALNUTS management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.

### Grouped Boxplots by Township for WALNUTS



**Table XXXIX-1. A/Y Summary Statistics for WALNUTS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
07N01E	24	0.0	0.0856	0.0015	0.0232	0.0353	0.0472	0.0696	4
08N01E	7	0.0	0.0431	0.0	0.0	0.0072	0.021	0.0382	1
08N02E	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
08N02W	3	0.0328	0.0328	0.0328	0.0328	0.0328	0.0328	0.0328	0
08N03E	3	0.0246	0.0246	0.0246	0.0246	0.0246	0.0246	0.0246	0
09N01E	3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
09N02E	3	0.0289	0.0494	0.0322	0.0371	0.0453	0.0474	0.0486	2
10N01E	1	0.086	0.086						
10N01W	6	0.0257	0.08	0.0263	0.0299	0.0492	0.0748	0.08	1
10N02E	11	0.015	0.051	0.025	0.0261	0.0347	0.046	0.051	1
10N03E	4	0.0255	0.064	0.0255	0.0255	0.0442	0.0632	0.0637	1
11N02E	6	0.0006	0.1	0.0053	0.0138	0.0327	0.04	0.07	2
11N03E	1	0.1	0.1						
12N01E	1	0.0167	0.0167						
12N01W	2	0.0173	0.05	0.0206	0.0255	0.0336	0.0418	0.0467	2
12N02E	7	0.0167	0.072	0.0167	0.0167	0.0167	0.0244	0.048	1
12N03E	7	0.0012	0.0275	0.0012	0.0012	0.0012	0.0272	0.0275	0
12N03W	1	0.0759	0.0759						
13N01E	8	0.03	0.091	0.03	0.03	0.054	0.0812	0.091	0
13N02E	1	0.015	0.015						
13N03E	33	0.0008	0.2625	0.0012	0.002	0.0365	0.115	0.2625	4
13N04E	64	0.0088	2.5	0.0145	0.0275	0.0335	0.0375	0.0425	11
13N05E	21	0.0013	0.0448	0.018	0.02	0.03	0.033	0.0448	2
14N01E	6	0.02	0.033	0.0207	0.0218	0.0278	0.0328	0.033	1
14N01W	5	0.019	1.0	0.019	0.019	0.019	0.019	0.6076	1
14N03E	37	0.0008	0.24	0.0045	0.0144	0.0313	0.0375	0.093	7
14N04E	4	0.0347	0.0375	0.0347	0.0347	0.0347	0.0354	0.0367	1
14N05E	12	0.0	0.089	0.0008	0.0082	0.0111	0.0459	0.0459	3
15N01E	6	0.0235	0.04	0.0235	0.0276	0.04	0.04	0.04	0
15N01W	12	0.025	0.057	0.0254	0.029	0.0535	0.057	0.057	2
15N02E	10	0.0142	0.1	0.0156	0.0226	0.0313	0.0616	0.1	1
15N03E	26	0.0038	0.13	0.0135	0.0253	0.0322	0.0429	0.0883	6
15N04E	12	0.008	0.0476	0.031	0.031	0.0363	0.0375	0.0402	3
16N01W	31	0.0175	1.0	0.018	0.0275	0.04	0.091	1.0	1
16N02W	5	0.0127	0.0438	0.0127	0.0127	0.0172	0.0172	0.0332	1

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
16N03E	30	0.0013	0.0558	0.0107	0.015	0.0221	0.029	0.0469	6
16N04E	6	0.0375	0.0375	0.0375	0.0375	0.0375	0.0375	0.0375	0
17N01W	7	0.02	0.06	0.02	0.04	0.06	0.06	0.06	0
17N02W	9	0.018	1.0	0.018	0.0481	0.0609	0.08	1.0	0
17N03E	39	0.0	0.15	0.0159	0.0225	0.0345	0.0584	0.0667	5
17N03W	3	0.0298	0.0393	0.0298	0.0298	0.0298	0.0346	0.0374	1
18N01W	25	0.0004	0.0677	0.0173	0.025	0.0284	0.0447	0.05	3
18N02W	1	0.0525	0.0525						
18N03E	6	0.0008	0.037	0.0078	0.0178	0.027	0.027	0.032	2
19N01W	82	0.014	1.0	0.0205	0.0247	0.031	0.06	0.06	13
19N02W	16	0.024	1.0	0.0281	0.0322	0.0336	1.0	1.0	2
20N01E	30	0.0075	0.112	0.0119	0.02	0.0258	0.0348	0.0453	6
20N01W	16	0.0103	0.05	0.0103	0.0144	0.0184	0.0247	0.0343	2
20N02E	3	0.003	0.025	0.007	0.013	0.023	0.024	0.0246	2
20N03W	3	0.0062	0.0429	0.0135	0.0246	0.0429	0.0429	0.0429	1
20N04W	1	0.043	0.043						
21N01E	54	0.0015	0.21	0.0102	0.016	0.0285	0.0525	0.1085	11
21N01W	26	0.021	0.189	0.021	0.0225	0.0295	0.0394	0.04	2
21N02E	15	0.013	0.0426	0.0188	0.019	0.0319	0.0387	0.0419	4
21N02W	8	0.0037	0.094	0.0037	0.0037	0.0435	0.047	0.0611	1
21N03W	16	0.0177	0.14	0.03	0.039	0.051	0.06	0.1	3
22N01E	42	0.009	0.182	0.016	0.0184	0.0227	0.0288	0.0617	10
22N01W	8	0.021	0.08	0.0364	0.0482	0.0505	0.0582	0.08	1
23N01W	29	0.0001	0.66	0.0132	0.0163	0.025	0.042	0.0471	6
23N02W	44	0.0005	0.1525	0.0092	0.0138	0.025	0.038	0.0539	10
24N02W	45	0.0049	0.25	0.0171	0.0173	0.022	0.024	0.0384	10
24N03W	1	0.026	0.026						
25N02W	13	0.008	0.033	0.008	0.008	0.026	0.03	0.03	1
25N03W	1	0.0213	0.0213						
26N02W	53	0.019	0.051	0.02	0.022	0.027	0.033	0.038	4
26N03W	5	0.016	0.034	0.0184	0.022	0.022	0.022	0.0292	2
27N03W	23	0.02	0.057	0.02	0.022	0.025	0.038	0.038	1
Unknown	5	0.0214	0.0385	0.0256	0.032	0.0359	0.0375	0.0381	2



**Table XXXIX-2. A/R Summary Statistics for WALNUTS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
07N01E	24	0.0	5.3659	0.0924	1.4562	2.208	2.9571	4.3619	4
08N01E	7	0.0	2.7014	0.0	0.0	0.4539	1.3222	2.3949	1
08N02E	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
08N02W	3	2.0553	2.0553	2.0553	2.0553	2.0553	2.0553	2.0553	0
08N03E	3	1.5423	1.5423	1.5423	1.5423	1.5423	1.5423	1.5423	0
09N01E	3	6.2696	6.2696	6.2696	6.2696	6.2696	6.2696	6.2696	0
09N02E	2	1.8119	3.0944	1.9402	2.1325	2.4532	2.7738	2.9662	2
10N01E	1	5.3918	5.3918						
10N01W	6	1.6122	5.0157	1.6502	1.8774	3.0812	4.6911	5.0157	1
10N02E	11	0.9404	3.1975	1.5674	1.6343	2.1768	2.884	3.1975	1
10N03E	4	1.5987	4.0125	1.5987	1.5987	2.7743	3.9655	3.9937	1
11N02E	6	0.038	6.2696	0.3325	0.868	2.0495	2.508	4.3888	2
11N03E	1	6.2696	6.2696						
12N01E	1	1.044	1.044						
12N01W	2	1.0876	3.1348	1.2923	1.5994	2.1112	2.623	2.9301	2
12N02E	7	1.044	4.514	1.044	1.044	1.044	1.525	3.0092	1
12N03E	7	0.076	1.724	0.076	0.076	0.076	1.7085	1.724	0
12N03W	1	4.7586	4.7586						
13N01E	8	1.881	5.7053	1.881	1.881	3.3856	5.094	5.7053	0
13N02E	1	0.9404	0.9404						
13N03E	33	0.047	16.458	0.072	0.123	2.285	7.21	16.458	4
13N04E	64	0.552	156.74	0.909	1.724	2.1005	2.351	2.665	11
13N05E	21	0.082	2.808	1.129	1.254	1.881	2.0697	2.808	2
14N01E	6	1.2539	2.069	1.293	1.3672	1.7396	2.0533	2.069	1
14N01W	5	0.6966	1.1912	0.8944	1.1912	1.1912	1.1912	1.1912	1
14N03E	37	0.048	15.047	0.282	0.904	1.959	2.351	5.831	7
14N04E	4	2.177	2.351	2.177	2.177	2.177	2.2205	2.2988	1
14N05E	12	0.002	5.58	0.053	0.512	0.694	2.877	2.877	3
15N01E	6	1.473	2.508	1.473	1.7318	2.508	2.508	2.508	0
15N01W	12	1.5674	3.5737	1.5925	1.818	3.3544	3.5737	3.5737	2
15N02E	10	0.889	6.27	0.9772	1.4182	1.9615	3.8618	6.27	1
15N03E	26	0.238	8.15	0.846	1.5827	1.897	2.382	2.7945	6
15N04E	12	0.502	2.985	1.944	1.944	2.2725	2.351	2.5202	3
16N01W	31	1.0972	17.0784	1.1285	1.7242	2.508	3.4035	3.8245	4
16N02W	5	0.7962	2.7429	0.7962	0.7962	1.0784	1.0784	2.0771	1

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
16N03E	30	0.082	3.498	0.6694	0.94	1.388	1.818	2.937	6
16N04E	6	2.351	2.351	2.351	2.351	2.351	2.351	2.351	0
17N01W	7	1.2539	3.7618	1.2539	2.5078	3.7618	3.7618	3.7618	0
17N02W	9	1.1285	5.0157	1.1285	3.0157	3.4035	3.8206	4.0596	1
17N03E	39	0.002	9.404	0.9952	1.412	2.163	3.6575	4.18	5
17N03W	3	1.8683	2.4669	1.8683	1.8683	1.8683	2.1676	2.3472	1
18N01W	25	0.0226	4.2432	1.0846	1.5674	1.783	2.8025	3.1348	3
18N02W	1	3.2931	3.2931						
18N03E	6	0.048	2.32	0.485	1.1147	1.693	1.693	2.0065	2
19N01W	82	0.8777	11.8495	1.2679	1.4044	1.8809	3.7618	3.7618	12
19N02W	16	1.2108	2.1944	1.2108	1.4312	1.9236	2.0165	2.1055	2
20N01E	30	0.47	7.022	0.7458	1.254	1.6145	2.1785	2.8398	6
20N01W	16	0.6458	3.1348	0.6458	0.9012	1.1568	1.547	2.1496	2
20N02E	3	0.188	1.567	0.4388	0.815	1.442	1.5045	1.542	2
20N03W	3	0.3893	2.687	0.8488	1.5381	2.687	2.687	2.687	1
20N04W	1	2.6959	2.6959						
21N01E	54	0.094	13.166	0.6393	1.001	1.693	3.009	6.803	13
21N01W	26	1.3166	11.8495	1.3166	1.4104	1.848	2.4699	2.5078	2
21N02E	15	0.815	2.671	1.1766	1.191	2.0	2.423	2.6258	4
21N02W	8	0.2342	5.8934	0.2342	0.2342	2.7272	2.9467	3.8307	1
21N03W	16	1.1102	8.7774	1.8809	2.4451	3.1975	3.7618	6.2696	3
22N01E	42	0.564	11.411	1.0036	1.1528	1.4225	1.806	3.8696	10
22N01W	8	1.3166	5.016	2.2822	3.0252	3.166	3.6518	5.016	1
23N01W	29	0.003	41.379	0.8278	1.019	1.567	2.633	2.9528	6
23N02W	42	0.549	13.6466	0.6314	1.0468	1.6436	2.4325	9.0532	10
24N02W	45	0.3072	15.674	1.0696	1.0846	1.3793	1.5016	2.4075	10
24N03W	1	1.6301	1.6301						
25N02W	12	0.5016	2.069	0.5016	0.5016	1.7116	1.8809	1.8809	1
25N03W	1	1.3375	1.3375						
26N02W	53	1.1912	3.1975	1.2539	1.3793	1.6928	2.069	2.3824	4
26N03W	5	1.0031	2.1317	1.1536	1.3793	1.3793	1.3793	1.8307	2
27N03W	23	1.2539	3.5737	1.2539	1.3793	1.5674	2.3824	2.3824	1
Unknown	5	1.342	2.414	1.6076	2.006	2.248	2.351	2.3888	2

**Table XXXIX-3. A-R Summary Statistics for WALNUTS management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
07N01E	24	-123.64	154.59	-59.05	8.64	59.94	110.53	146.44	4
08N01E	7	-84.96	104.56	-84.96	-77.99	-58.55	8.76	62.97	2
08N02E	2	-25.81	-1.06	-23.33	-19.62	-13.44	-7.25	-3.54	2
08N02W	3	38.72	38.72	38.72	38.72	38.72	38.72	38.72	0
08N03E	3	54.15	54.15	54.15	54.15	54.15	54.15	54.15	0
09N01E	3	96.66	96.66	96.66	96.66	96.66	96.66	96.66	0
09N02E	3	50.11	97.23	56.66	66.5	82.9	90.06	94.37	2
10N01E	1	126.25	126.25						
10N01W	6	41.01	156.12	44.99	51.0	63.11	134.38	156.12	1
10N02E	11	-1.9	140.2	43.44	50.46	54.06	85.34	140.2	1
10N03E	4	26.59	90.09	26.59	26.59	50.64	78.54	85.47	1
11N02E	6	-3325.8	144.3	-1701.6	-43.91	76.6	132.39	144.3	1
11N03E	1	96.66	96.66						
12N01E	1	4.2	4.2						
12N01W	2	7.73	111.0	18.06	33.55	59.37	85.19	100.68	2
12N02E	7	4.2	140.1	4.2	4.2	4.2	57.0	121.92	1
12N03E	7	-2324.9	69.3	-2251.52	-2202.6	-2202.6	69.05	69.3	1
12N03W	1	165.87	165.87						
13N01E	8	74.9	173.0	74.9	74.9	114.95	159.5	173.0	0
13N02E	1	-5.0	-5.0						
13N03E	33	-2055.1	854.7	-1434.52	-819.3	60.12	430.7	854.7	4
13N04E	64	-142.39	223.56	-8.0	62.82	86.2	106.63	123.69	13
13N05E	21	-853.76	259.5	4.0	4.0	39.68	96.2	105.4	3
14N01E	6	21.2	48.0	22.35	26.88	41.0	47.25	48.0	1
14N01W	5	-30.0	15.62	-11.89	15.28	15.28	15.28	15.48	2
14N03E	37	-2518.3	497.1	-400.58	-7.9	61.2	81.1	261.54	8
14N04E	4	81.1	86.2	81.1	81.1	81.1	82.38	84.67	1
14N05E	12	-1347.86	190.4	-1222.6	-95.23	-22.7	101.8	108.82	4
15N01E	6	48.2	111.05	48.2	63.91	111.05	111.05	111.05	0
15N01W	12	53.9	175.44	53.9	80.97	152.42	175.44	175.44	0
15N02E	10	-6.9	133.5	-2.04	31.43	46.35	51.45	71.04	2
15N03E	26	-358.5	181.3	-10.05	39.19	72.4	95.7	162.19	5
15N04E	12	-99.4	133.0	82.06	86.2	88.55	99.4	99.4	3
16N01W	31	6.0	256.4	14.0	73.0	117.0	161.0	201.4	4
16N02W	5	-8.67	89.0	-8.67	-8.67	8.0	8.0	56.6	1

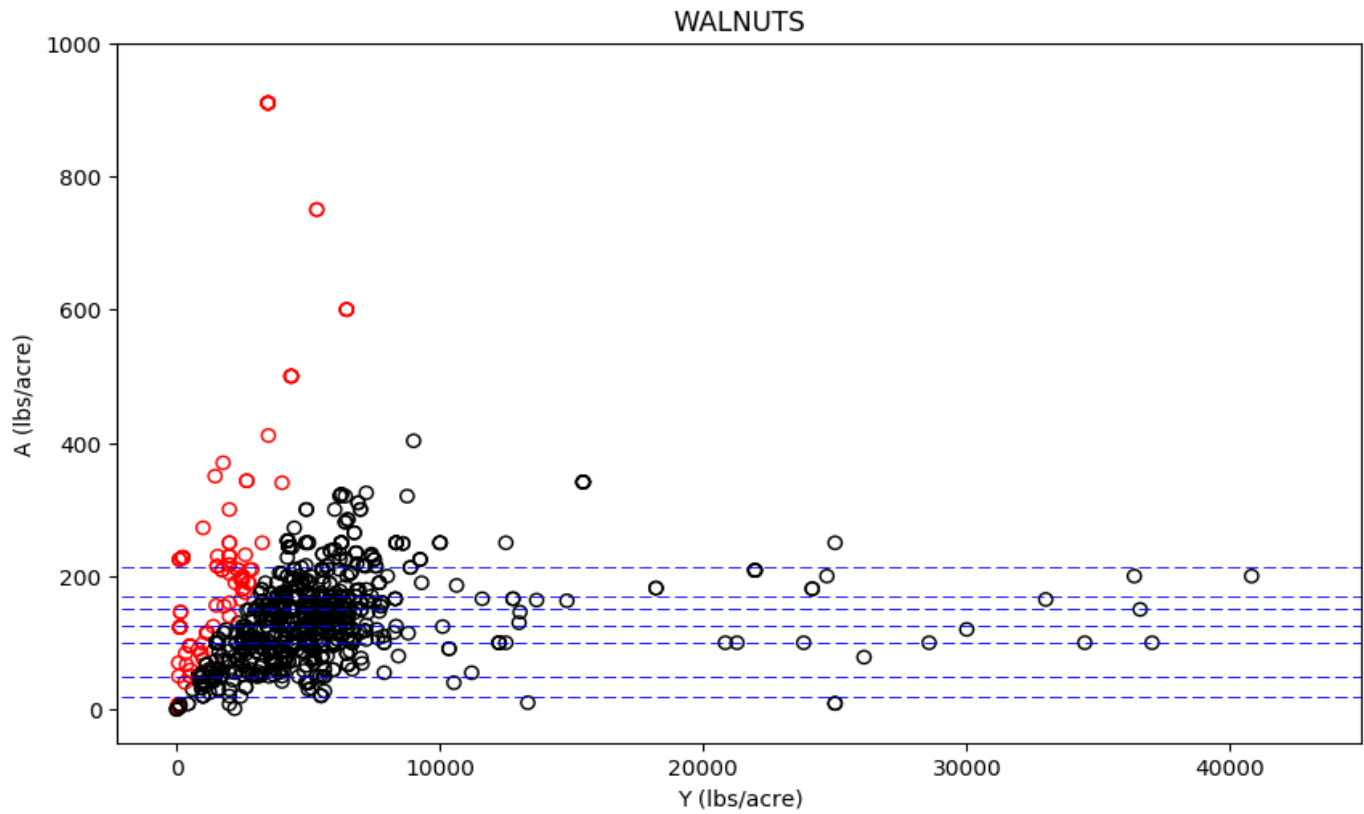
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
16N03E	30	-1690.4	106.26	-54.79	-6.3	67.87	76.5	95.4	5
16N04E	6	86.2	86.2	86.2	86.2	86.2	86.2	86.2	0
17N01W	7	20.04	37.0	20.04	28.52	37.0	37.0	37.0	0
17N02W	9	14.0	221.0	14.0	84.0	128.0	161.0	221.0	0
17N03E	39	-191100.0	268.1	-1.7	29.15	76.1	106.85	124.46	8
17N03W	3	23.0	119.0	23.0	23.0	23.0	71.0	99.8	1
18N01W	25	-390.0	126.0	3.0	20.0	57.0	94.0	106.2	6
18N02W	1	142.85	142.85						
18N03E	6	-3473.7	96.7	-1740.05	7.47	49.1	49.1	72.9	2
19N01W	82	-15.0	223.0	26.2	37.0	47.0	69.0	112.0	17
19N02W	16	21.22	76.0	21.22	23.08	23.7	53.25	71.0	2
20N01E	30	-203.9	164.4	-20.66	17.0	43.4	76.78	126.52	6
20N01W	16	-37.0	218.0	-37.0	-9.5	8.0	31.75	120.0	2
20N02E	3	-338.0	65.2	-264.26	-153.65	30.7	47.95	58.3	2
20N03W	3	-50.2	94.0	-21.36	21.9	94.0	94.0	94.0	1
20N04W	1	75.0	75.0						
21N01E	54	-2567.4	665.2	-35.4	0.17	55.45	81.78	185.1	10
21N01W	26	30.0	355.4	30.0	36.45	78.0	129.25	150.0	1
21N02E	15	-37.7	145.0	4.8	11.0	41.1	96.56	131.06	3
21N02W	8	-66.53	150.0	-66.53	-66.53	73.0	139.0	142.3	1
21N03W	16	5.0	191.0	78.5	111.5	165.5	186.0	188.5	4
22N01E	42	-46.3	665.2	0.41	12.17	25.9	52.62	85.83	10
22N01W	8	30.0	171.8	97.06	151.52	165.15	170.6	171.8	1
23N01W	29	-47700.0	2531.3	-27.86	1.8	36.2	55.6	178.58	6
23N02W	42	-108.3	276.2	-37.48	0.55	29.49	42.52	54.68	10
24N02W	45	-62.02	198.21	5.24	7.02	30.06	33.28	65.61	9
24N03W	1	50.25	50.25						
25N02W	12	-39.75	78.51	-39.75	-39.75	47.94	72.59	72.59	1
25N03W	1	40.38	40.38						
26N02W	53	14.62	121.86	15.25	33.28	57.3	79.63	96.48	11
26N03W	5	0.3	79.63	13.49	33.28	33.28	33.28	61.09	2
27N03W	23	14.62	121.86	20.05	23.79	33.28	121.86	121.86	1
Unknown	5	38.2	112.7	46.8	59.7	86.2	87.8	102.74	2

**Table XXXIX-4. Summary Statistics for WALNUTS management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	1050	0.0	2.5	0.011	0.02	0.0299	0.0425	0.0668	209
A/R	1050	0.0	156.74	0.727	1.254	1.8274	2.6331	3.7619	210
A-R	1050	-191100.0	2531.3	-24.86	19.85	52.0	91.95	150.0	205

**Figure XXXIX-2. Scatter plot of A vs. Y for WALNUTS with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers ( $A/Y > 90\%$  for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.

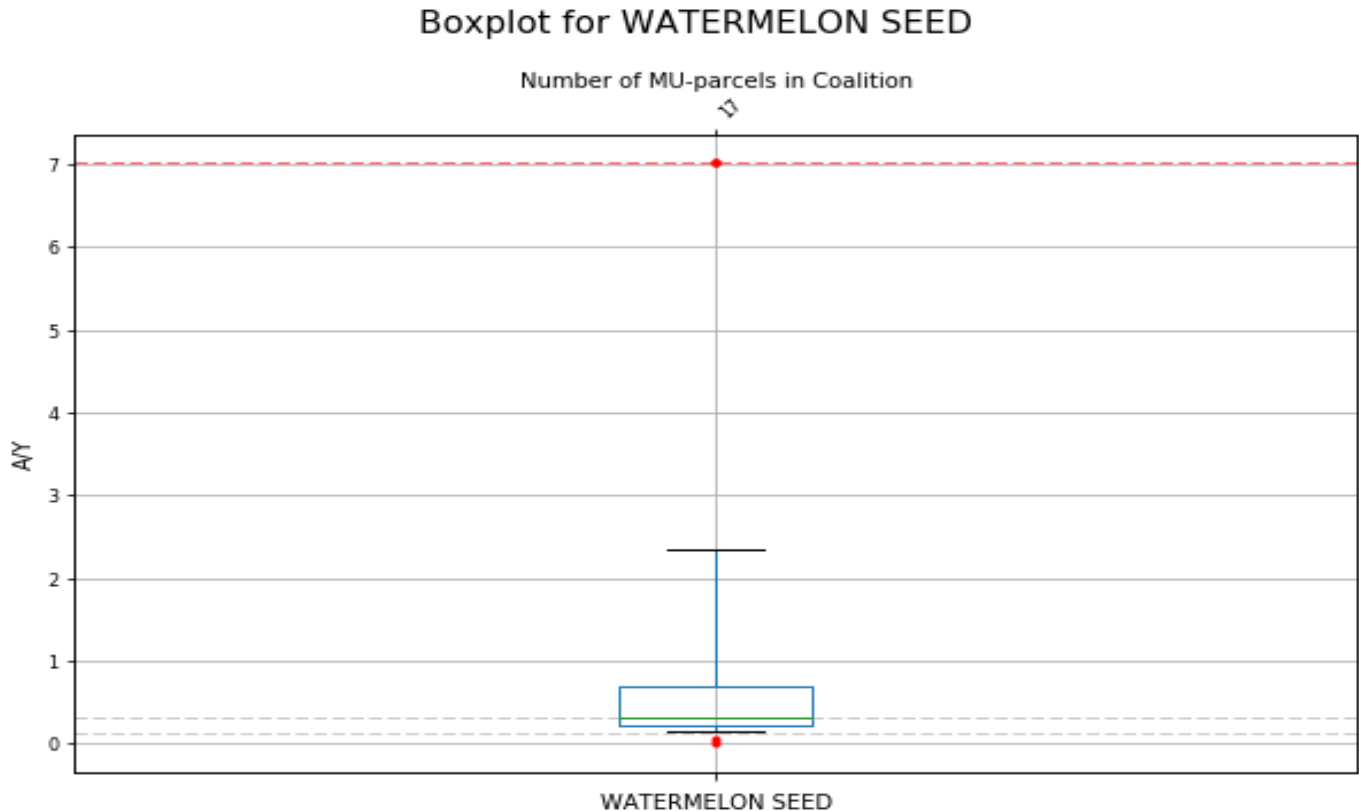


NOTE: 29 records above Yield value of 45000 lbs/acre not shown to avoid skewing of scatter plot

# XL. WATERMELON SEED

**Figure XL-1. Box and Whisker plots of A/Y for WATERMELON SEED management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.



**Table XL-1. A/Y Summary Statistics for WATERMELON SEED management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
17	0.0071	7.0171	0.1145	0.216	0.3099	0.6944	7.0171	5

**Table XL-2. A/R Summary Statistics for WATERMELON SEED management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
12	0.0	636.2806	0.0	0.0	148.1918	462.3762	613.5534	2

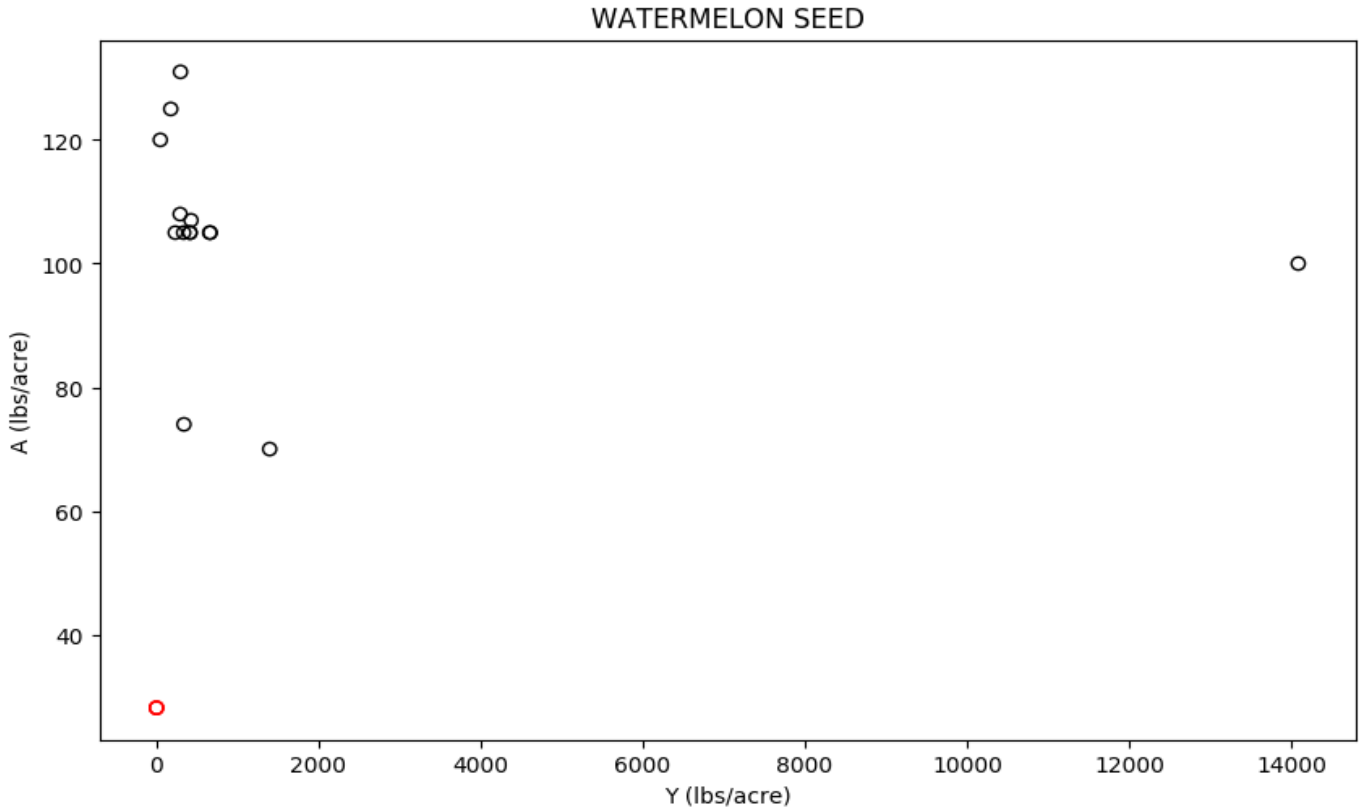
**Table XL-3. A-R Summary Statistics for WATERMELON SEED management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
12	69.02	130.79	100.45	104.71	105.0	106.96	118.77	4

**Figure XL-2. Scatter plot of A vs. Y for WATERMELON SEED with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.

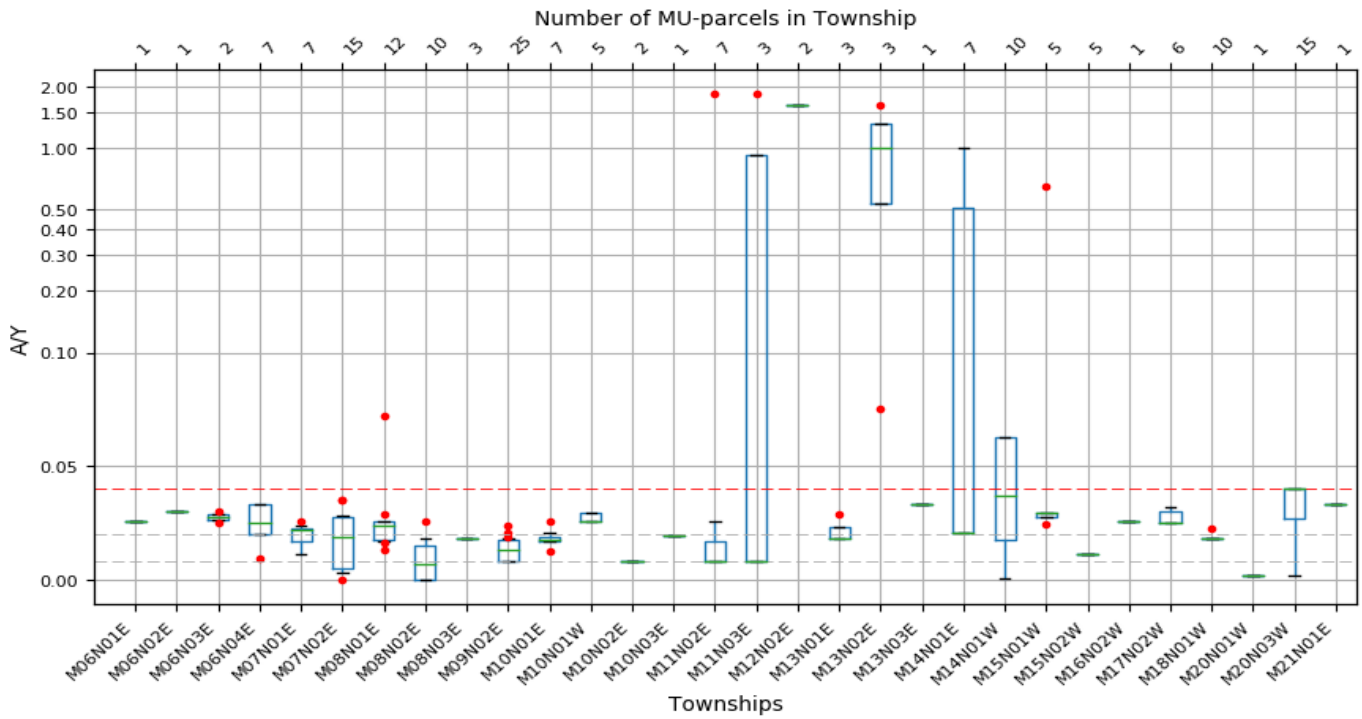


# XLI. WHEAT

**Figure XLI-1. Box and Whisker plots of A/Y for WHEAT management units grouped by T-R.**

Numbers at the top indicate the number of MU-parcels within each T-R. Red dots are local outliers (A/Y > 90% percentile or < 10% percentile) within each T-R. Horizontal dashed lines represent the 10% and 50% percentiles (grey lines), and 90% percentiles (red line) for all records in the Coalition.

**Grouped Boxplots by Township for WHEAT**





**Table XLI-1. A/Y Summary Statistics for WHEAT management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
06N01E	1	0.0259	0.0259						
06N02E	1	0.03	0.03						
06N03E	2	0.025	0.03	0.0255	0.0262	0.0275	0.0288	0.0295	2
06N04E	7	0.0096	0.0333	0.0158	0.02	0.025	0.0333	0.0333	1
07N01E	7	0.0115	0.0259	0.0115	0.0167	0.0219	0.0229	0.0247	1
07N02E	15	0.0	0.035	0.0034	0.0051	0.019	0.0279	0.0323	3
08N01E	12	0.0133	0.0721	0.0162	0.0177	0.024	0.0257	0.0286	4
08N02E	10	0.0	0.0257	0.0	0.0	0.0069	0.015	0.0189	1
08N03E	3	0.0182	0.0182	0.0182	0.0182	0.0182	0.0182	0.0182	0
09N02E	25	0.008	0.0236	0.008	0.008	0.013	0.0175	0.0185	3
10N01E	7	0.0125	0.0258	0.015	0.0171	0.0175	0.0192	0.0228	2
10N01W	5	0.0258	0.0298	0.0258	0.0258	0.0258	0.0298	0.0298	0
10N02E	2	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0
10N03E	1	0.0198	0.0198						
11N02E	7	0.008	1.833	0.008	0.008	0.008	0.0169	0.7487	1
11N03E	3	0.008	1.833	0.008	0.008	0.008	0.9205	1.468	1
12N02E	2	1.62	1.62	1.62	1.62	1.62	1.62	1.62	0
13N01E	3	0.018	0.029	0.018	0.018	0.018	0.0235	0.0268	1
13N02E	3	0.075	1.62	0.26	0.5375	1.0	1.31	1.496	2
13N03E	1	0.0336	0.0336						
14N01E	7	0.021	1.0	0.021	0.021	0.021	0.5105	1.0	0
14N01W	10	0.0004	0.0625	0.0004	0.0176	0.037	0.0625	0.0625	0
15N01W	5	0.0243	0.6509	0.0255	0.0274	0.0298	0.0298	0.4025	2
15N02W	5	0.0113	0.0113	0.0113	0.0113	0.0113	0.0113	0.0113	0
16N02W	1	0.0259	0.0259						
17N02W	6	0.025	0.032	0.025	0.025	0.0253	0.0304	0.032	0
18N01W	10	0.018	0.0227	0.018	0.018	0.018	0.018	0.0185	1
20N01W	1	0.0018	0.0018						
20N03W	15	0.0017	0.04	0.0017	0.0273	0.04	0.04	0.04	0
21N01E	1	0.0333	0.0333						

**Table XLI-2. A/R Summary Statistics for WHEAT management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
06N01E	1	1.2059	1.2059						
06N02E	1	1.3953	1.3953						
06N03E	2	1.1628	1.3953	1.186	1.2209	1.279	1.3372	1.372	2
06N04E	7	0.4561	1.5505	0.7406	0.9302	1.1628	1.5505	1.5505	1
07N01E	7	0.5372	1.2059	0.5372	0.7773	1.0174	1.0639	1.1486	1
07N02E	15	0.0	1.6279	0.1604	0.2366	0.8821	1.2982	1.5023	3
08N01E	12	0.6185	3.3542	0.7535	0.8237	1.1126	1.1944	1.3279	4
08N02E	10	0.0	1.197	0.0	0.0	0.3209	0.6988	0.8836	1
08N03E	3	0.8457	0.8457	0.8457	0.8457	0.8457	0.8457	0.8457	0
09N02E	25	0.3721	1.0953	0.3721	0.3721	0.6047	0.814	0.862	3
10N01E	7	0.5814	1.1986	0.6972	0.7942	0.814	0.8907	1.0599	2
10N01W	5	1.1986	1.3837	1.1986	1.1986	1.1986	1.3837	1.3837	0
10N02E	2	0.3721	0.3721	0.3721	0.3721	0.3721	0.3721	0.3721	0
10N03E	1	0.9192	0.9192						
11N02E	7	0.3721	85.256	0.3721	0.3721	0.3721	0.7854	34.8216	1
11N03E	3	0.3721	85.256	0.3721	0.3721	0.3721	42.814	68.2792	1
12N02E	2	75.349	75.349	75.349	75.349	75.349	75.349	75.349	0
13N01E	3	0.8372	1.349	0.8372	0.8372	0.8372	1.0931	1.2466	1
13N02E	3	1.2828	75.349	1.7238	2.3854	3.488	39.4185	60.9768	2
13N03E	1	1.563	1.563						
14N01E	7	0.9767	1.2828	0.9767	0.9767	0.9767	1.1298	1.2828	0
14N01W	10	0.0208	5812.5581	0.0208	0.8198	1.721	5812.5581	5812.5581	0
15N01W	5	1.1305	30.2744	1.1874	1.2727	1.3845	1.3845	18.7184	2
15N02W	5	0.5274	0.5274	0.5274	0.5274	0.5274	0.5274	0.5274	0
16N02W	1	1.2047	1.2047						
17N02W	6	1.1628	1.4884	1.1628	1.1628	1.174	1.4126	1.4884	0
18N01W	10	0.8372	1.0558	0.8372	0.8372	0.8372	0.8372	0.8591	1
20N01W	1	0.0831	0.0831						
20N03W	15	0.0775	1.8605	0.0775	1.2698	1.8605	1.8605	1.8605	0
21N01E	1	1.549	1.549						

**Table XLI-3. A-R Summary Statistics for WHEAT management units grouped by T-R.**

For T-R blocks with only one management unit, no summary statistics could be calculated. Management units that span multiple T-R blocks are counted within all of those T-R blocks.

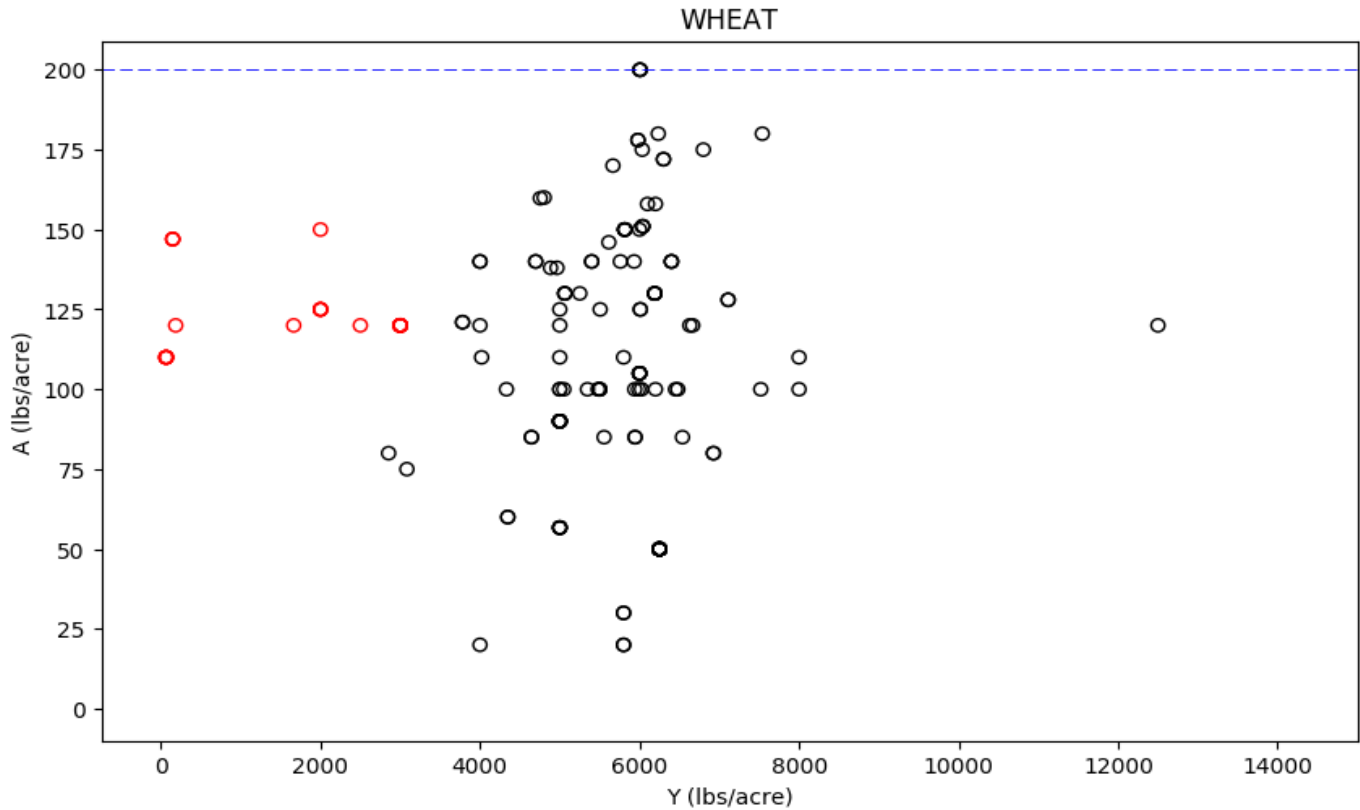
T-R	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
06N01E	1	23.9	23.9						
06N02E	1	34.0	34.0						
06N03E	2	21.0	48.17	23.72	27.79	34.58	41.38	45.45	2
06N04E	7	-143.12	71.01	-61.75	-7.5	17.5	71.01	71.01	1
07N01E	7	-78.24	23.9	-78.24	-37.92	2.4	10.14	20.29	1
07N02E	15	-215.0	54.0	-104.7	-94.7	-20.46	15.66	40.11	3
08N01E	12	-61.68	84.22	-32.74	-24.42	11.99	21.16	34.08	4
08N02E	10	-121.69	28.8	-121.69	-121.69	-97.06	-47.6	-13.16	1
08N03E	3	-18.25	-18.25	-18.25	-18.25	-18.25	-18.25	-18.25	0
09N02E	25	-84.38	12.19	-84.38	-84.38	-55.58	-24.0	-14.68	2
10N01E	7	-72.0	24.85	-46.28	-26.56	-24.0	-14.1	7.42	2
10N01W	5	24.85	38.82	24.85	24.85	24.85	38.82	38.82	0
10N02E	2	-84.38	-84.38	-84.38	-84.38	-84.38	-84.38	-84.38	0
10N03E	1	-8.79	-8.79						
11N02E	7	-84.38	108.71	-84.38	-84.38	-84.38	-29.76	58.4	1
11N03E	3	-84.38	108.71	-84.38	-84.38	-84.38	12.17	70.09	1
12N02E	2	108.54	108.54	108.54	108.54	108.54	108.54	108.54	0
13N01E	3	-25.0	45.26	-25.0	-25.0	-25.0	10.13	31.21	1
13N02E	3	32.0	108.54	47.0	69.5	107.0	107.77	108.23	2
13N03E	1	57.55	57.55						
14N01E	7	-3.0	32.0	-3.0	-3.0	-3.0	14.5	32.0	0
14N01W	10	-4713.0	124.98	-4713.0	-26.25	45.5	124.98	124.98	0
15N01W	5	16.0	116.0	19.2	24.0	49.0	49.0	89.2	2
15N02W	5	-51.3	-51.3	-51.3	-51.3	-51.3	-51.3	-51.3	0
16N02W	1	27.0	27.0						
17N02W	6	21.0	40.0	21.0	21.0	23.0	36.25	40.0	0
18N01W	10	-18.0	7.0	-18.0	-18.0	-18.0	-18.0	-15.5	1
20N01W	1	-552.0	-552.0						
20N03W	15	-595.0	55.0	-595.0	37.0	55.0	55.0	55.0	0
21N01E	1	56.7	56.7						

**Table XLI-4. Summary Statistics for WHEAT management units in Coalition.**

Parameter	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
A/Y	178	0.0	1.833	0.008	0.0115	0.0199	0.028	0.04	33
A/R	178	0.0	5812.5581	0.3721	0.5372	0.9247	1.2828	1.8605	30
A-R	178	-4713.0	124.98	-85.31	-61.92	-11.74	31.2	55.51	36

**Figure XLI-2. Scatter plot of A vs. Y for WHEAT with all T-R together.**

Each dot represents one MU-parcel. Red dots represent regional outliers (A/Y > 90% for all T-R together). Blue lines represent recommended or typical N application rates as described in Appendix B.



NOTE: 6 records above Yield value of 15000 lbs/acre not shown to avoid skewing of scatter plot

## XLII. OTHER CROPS

**Table XLII-1. A/Y summary statistics for crops with limited representation in the SVWQC region.**

Summary statistics are reported across the Coalition rather than each township due to limited representation of these crops. For crops with only one MU, no summary statistics could be calculated.

Crop	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
3 GRAIN	4	0.0086	0.0263	0.0109	0.0144	0.0194	0.0233	0.0251	2
BARLEY	1	0.0664	0.0664						
CABBAGE	1	0.0058	0.0058						
CARROT SEED	2	0.32	0.32	0.32	0.32	0.32	0.32	0.32	
CHERRY	1	0.0175	0.0175						
CITRUS	4	0.0	0.0424	0.0003	0.0007	0.001	0.0114	0.03	2
CORIANDER	2	0.0313	0.0313	0.0313	0.0313	0.0313	0.0313	0.0313	
CUCUMBER SEED	4	0.211	3.35	0.4927	0.9152	1.465	2.1725	2.879	2
DICHONDRA	1	0.2	0.2						
DICHONDRA SEED	1	0.25	0.25						
DORMANT BAREROOT GRAPEVINES	2	0.0	0.01	0.001	0.0025	0.005	0.0075	0.009	2
FILBERTS	1	0.0	0.0						
GARDEN	1	0.0012	0.0012						
GRAIN HAY	4	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	0.0048	
GRAPE ROOTSTOCK	1	3.92	3.92						
GRAPE ROOTSTOCK & SCIONWOOD	2	0.0	0.01	0.001	0.0025	0.005	0.0075	0.009	2
GRASS HAY	1	0.0	0.0						
KALE SEED	1	0.1059	0.1059						
LETTUCE	2	0.27	0.27	0.27	0.27	0.27	0.27	0.27	
MELON SEED	1	0.09	0.09						
MISC ROW CROPS	1	0.03	0.03						
NECTARINE	1	0.096	0.096						
ONION SEED	2	1.0289	1.29	1.055	1.0942	1.1595	1.2247	1.2639	2
OTHER	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
PECAN	3	0.057	0.1278	0.0712	0.0924	0.1278	0.1278	0.1278	1
PUMPKIN	1	0.0023	0.0023						
STRAWBERRIES	2	0.0006	0.0013	0.0007	0.0008	0.0009	0.0011	0.0012	2
TURNIP SEED	1	0.17	0.17						

**Table XLII-1. A/R summary statistics for crops with limited representation in the SVWQC region.**

Summary statistics are reported across the Coalition rather than each township due to limited representation of these crops. For crops with only one MU, no summary statistics could be calculated.

Crop	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
BARLEY	1	3.9537	3.9537						
CABBAGE	1	0.0	0.0						
CHERRY	1	7.9186	7.9186						
LETTUCE	2	205.0	205.0	205.0	205.0	205.0	205.0	205.0	
NECTARINE	1	52.747	52.747						
ORANGE	1	0.6081	0.6081						
PUMPKIN	1	0.625	0.625						

**Table XLII-1. A-R summary statistics for crops with limited representation in the SVWQC region.**

Summary statistics are reported across the Coalition rather than each township due to limited representation of these crops. For crops with only one MU, no summary statistics could be calculated.

Crop	No. MU-parcels	Min	Max	10%	25%	50%	75%	90%	No. Outliers
BARLEY	1	102.2783	102.2783						
CABBAGE	1	105.0	105.0						
CHERRY	4	0.0	96.1086	9.6109	24.0271	48.0543	72.0814	86.4977	2
LETTUCE	2	119.416	119.416	119.416	119.416	119.416	119.416	119.416	
NECTARINE	1	94.2	94.2						
PUMPKIN	1	-42.0	-42.0						

## **APPENDIX B**

### **FERTILIZER RECOMMENDATIONS**

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**Recommended nitrogen application values (lbs/acre).**

<b>Crop</b>	<b>Min</b>	<b>Max</b>	<b>Notes</b>	<b>Source</b>
Hay, Alfalfa (established)	0	0	In general, N applications after stand establishment are only effective when nodulation and N fixation are restricted.	CDFA
Hay, Alfalfa (planting)	20	40	A starter application may be beneficial when the residual nitrate concentration is below 3-4 ppm NO <sub>3</sub> -N. Larger amounts of N may inhibit symbiotic N fixation.	CDFA
Almonds - Year 1	6.25	18.75	Suggested rates for drip-irrigated trees on non-fertile soils. Values converted from ounces/tree to lbs/acre assuming 100 trees/acre	CDFA
Almonds - Year 2	12.5	37.5		
Almonds - Year 3	25	75		
Almonds - Year 4	37.5	100		
Almonds - Year 5	100	200		
Almonds - Year > 4	95	380	Fertilization rate dependent on desired yield. Minimum value for 1000 lbs/acre yield; max for 4000 lbs/acre yield. Fertigation via low volume irrigation.	
Apples - Years 1 - 3	20	60	Values are from cost study, not recommendations, but rates considered typical. Assumes 14-30 tons/acre granny smith variety. Density of 340 trees/acre and fertigation via micro-sprinkler.	UC Davis
Apples - Year 4+	80	80		
Asparagus (planting)	16.8	16.8	Values are from cost study, not recommendations, but rates considered	UC Davis
Asparagus (established)	90	90		



**Recommended nitrogen application values (lbs/acre).**

<b>Crop</b>	<b>Min</b>	<b>Max</b>	<b>Notes</b>	<b>Source</b>
Beans, Blackeye	0	0	Blackeye beans fix all N from atmosphere, but a small amount of starter N can sometimes increase yield	CDFA
Beans, Common	65	125	Estimated N applications for dry bean crops with a yield goal of 2500 lbs/acre	
Beans, Garbanzo	35	110		
Beans, Lima	55	125		
Corn	150	270	Rates dependent on yield goal and pre-sidedress nitrate test (PSNT). Values are from other states and have not been tested in California. These values are for a PSNT < 10 ppm and yields of 150 bu/ac - grain (25 tons/ac - silage) to 225 bu/ac - grain (38 tons/ac)	CDFA
Cucumber	80	150	Values dependent on soil type and nutrient carryover. Slicing cucumbers may require 300 lbs/ac N or more.	UCANR
Garlic		256	Values are from cost study, not recommendations, but rates considered typical.	UC Davis
Grapes - Raisin	0	60	Values dependent on irrigation type, vine vigor, and soil type. Lower values recommended for drip irrigation compared to furrow and for vigorous vines. Higher values for weak vigor and sandy soils.	CDFA
Grapes - Wine	0	40	Same considerations as above. Wine grape yield is lower compared to raisins, requiring less N.	

**Recommended nitrogen application values (lbs/acre).**

<b>Crop</b>	<b>Min</b>	<b>Max</b>	<b>Notes</b>	<b>Source</b>
Kiwi		150	For fullbearing vines, use 1 lb of N per plant. Younger plants (yrs 1 - 4) should receive less.	UC Davis
Melon - Cantaloupe/Honeydew	50	250	Values vary based on yield goal. Numbers are for cantaloupe; honeydew likely requires less N/acre.	CDFA
Melon - Watermelon		160	Values vary based on yield goal.	UCANR
Milo/Sorghum		140	Values are from cost study, not recommendations, but rates considered typical.	UC Davis
Oat Hay	50	75	Values are from cost study, not recommendations, but rates considered typical.	UC Davis
Olive	40	100	Varies based on fruit load, variety, orchard spacing, and pruning. Values are for California oil variety in irrigated, super-high density system. Application rates should be adjusted for N residue in prunings and alternate bearing years.	CDFA
Pasture	32	42	Values are from cost study, not recommendations, but rates considered typical.	UC Davis
Peach	63	155	Minimum value for 6 ton/ac yield, max for 30 ton/ac yield. Assumes prunings are not removed from the orchard. For young trees, recommended rates are lower	CDFA

**Recommended nitrogen application values (lbs/acre).**

Crop	Min	Max	Notes	Source
Pear - Years 1 -6	35	75	Values are from cost study, not recommendations, but rates considered typical. Varies based on tree nitrogen status	UC Davis
Pear - Year 7+	120	150		
Pecan - Years 1 -6	6	100	Values are from cost study, not recommendations, but rates considered	UC Davis
Pecan - Years 7+		200		
Peppers - Fresh		275	Values are from cost study, not recommendations, but rates considered typical.	UC Davis
Peppers - Processing		200	Values are from cost study, not recommendations, but rates considered typical.	UC Davis
Persimmon - Year 1	10	21	Varies based on tree age and variety. 2oz N per year of tree age per tree. Values converted from oz/tree to lbs/acre assuming 170 trees/acre for Fuyu and 75 trees/acre for Hachiya.	UCANR
Persimmon - Year 10	94	212		
Pistachio - 1st Leaf	0	150	Based on optimal leaf N concentration for rapidly growing immature trees and a density of 120 tree/acre.	CDFA
Pistachio - 2nd Leaf	18	24		
Pistachio - 3rd Leaf	30	42		
Pistachio - 4th Leaf	60	72		
Pistachio - 5th Leaf	100	120		
Pistachio - 6th Leaf	120	130		
Pistachio - 7th Leaf	135	150		
Pistachio - Year > 9 (Drip)	40	240	Values vary based on yield goal. Minimum value is for 1000 lbs/ac yield, max for 6000 lb/ac yield	
Pistachio - Year >10 (Furrow)	56	336		

**Recommended nitrogen application values (lbs/acre).**

<b>Crop</b>	<b>Min</b>	<b>Max</b>	<b>Notes</b>	<b>Source</b>
Plum/Pluot	100	150		CDFA
Prunes - Year 1	5	10	Assumes density of 183 trees/acre	CDFA
Prunes - Year 2		25		
Prunes - Year 3		30		
Prunes - Year 4		40		
Prunes - Year 5		75		
Prunes - Year >5	65	150	Varies based on yield. Assumes N application through drip or microsprinklers and an N use efficiency of 70%	
Ryegrass		200	Values are from cost study, not recommendations, but rates considered typical.	UC Davis
Safflower	40	180	Varies based on yield goal. Minimum is for 1000 lb/ac yield, max is for 3000 lb/ac yield	CDFA
Squash	80	150	Values are for summer squash	UC Davis
Strawberries		158	Value is for second year of production from cost study, not recommendations, but rates considered typical.	UC Davis
Sudan Grass		140	Values are from cost study, not recommendations, but rates considered typical.	UC Davis
Sunflower	45	175	Varies based on yield goal. Minimum is for 1000 lb/ac yield, max is for 2500 lb/ac yield	CDFA

**Recommended nitrogen application values (lbs/acre).**

<b>Crop</b>	<b>Min</b>	<b>Max</b>	<b>Notes</b>	<b>Source</b>
Tomato - Fresh	100	180	Typical grower rates for bush-grown are 125-250 lbs N/ac and for pole-grown 150-350 lbs N/ac. Values shown are UC recommended rates.	UCANR
Tomato - Processing	150	175	For drip-irrigated tomatoes	CDFA
Tomato - Processing	100	150	For furrow irrigated tomatoes	
Walnuts - Year 1	10	20	Lower rate is for N applied through drip or microsprinkler on fertile soils. Assumes density of 65 trees/ac	CDFA
Walnuts - Year 2	25	50		
Walnuts - Year 3	50	100		
Walnuts - Year 4	63	125		
Walnuts - Year 5	75	150		
Walnuts - Year >5 (Fertigation)	68	169	Varies based on yield goal. Minimum is for 1 ton/ac yield, max is for 2.5 tons/ac yield.	
Walnuts - Year >5 (Split broadcast)	86	214		
Wheat	150	200	Values are from study producing 4-4.6 tons/ac. Does not include residual soil N (30-80 lbs/acre)	CDFA
Durum Wheat		240	Split into preplant, tillering, and boot stage applications	

## **APPENDIX C**

### **EXAMPLE MEMBER NMP SUMMARY REPORT**

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**Sacramento Valley Water Quality Coalition  
2016 Nitrogen Management Plan Summary Report Results**

**Member ID:** [ ]

**Grower Name:** [ ]

**Crop:** [ ]

These results represent information you provided on your 2016 Nitrogen Management Plan Summary Report comparing your Nitrogen *Applied* divided by your *Yield* (A/Y) to other fields of the same crop in your Township(s).

For more detailed information, please refer to the cover letter included with your 2016 Nitrogen Management Plan Summary Results.

The table below includes:

**Columns 1 & 2:** Your Applied pounds of Nitrogen per acre compared to the average pounds of Nitrogen Applied per acre within your parcel's Township.

**Columns 3 & 4:** Your A/Y per acre compared to the average A/Y per acre within your parcel's Township.

**Columns 5 & 6:** Your Nitrogen *Applied* divided by the Nitrogen *Removed* (A/R)<sup>4</sup> per acre compared to the average A/R per acre within your parcel's Township

Member ID	Member APN	Member # of Irr. Acres	(1) Member lbs. of N Applied per Acre	(2) Township Average lbs. of N Applied per Acre	(3) Member A/Y per Acre	(4) Township Average <sup>1</sup> A/Y per Acre	(5) Member A/R per Acre <sup>5</sup>	(6) Township Average A/R per Acre	Township	# of Parcels in Township <sup>2</sup>
XXXXXX	XXXXXX	XX	XX	XX	XX	XX	XX	XX	XXXX	XX
XXXXXX	XXXXXX	XX	XX	XX	XX	XX	XX	XX	XXXX	XX

**A/Y and A/R Status Color Key**

Outlier<sup>3</sup> (>90% of parcels)
  High (>75% of parcels)
  Average (<75% of parcels)
  Not Enough Data

The A/Y and A/R status color shows how your parcels compare to others of the same crop in the same Township. If your A/Y or A/R values are greater than 90% of all parcels in the Township, that is considered to be an “outlier” value. A value is considered “high” if it is greater than 75% of all parcels in the Township and “average” if the value is less than 75% of all parcels in the Township. In some cases, there were not enough data points in the Township to calculate outliers.

If one of your management units (MUs) included parcels in more than one Township, the A/Y and A/R status for that MU could be different for each Township.

**Notes:**

1. Average is calculated using median value
2. A Township is typically six by six square miles, 36 Sections, or 23,040 acres. Parcels can be counted more than once in a Township if there are multiple fields of the same crop associated with that parcel.
3. Outliers have an Applied Nitrogen over Yield value that is greater than 90% of other high vulnerability parcels of the same crop in that Township.
4. A/R Value: The purpose of this value is to estimate the amount of residual Nitrogen available to leach to groundwater. The A/R value (total Applied N divided by N Removed), was calculated using published N removal values from: *Nitrogen concentrations in harvested plant parts - A literature overview* (Geisseler, 2016) ([https://apps1.cdfa.ca.gov/FertilizerResearch/docs/Geisseler\\_Report\\_2016\\_12\\_02.pdf](https://apps1.cdfa.ca.gov/FertilizerResearch/docs/Geisseler_Report_2016_12_02.pdf)). This publication documents the best available information, but values are expected to be updated and modified as new information becomes available. For many crops, the publication indicates only few if any values could be found, while for others extensive datasets were available.

## **APPENDIX D**

### **TABULAR GIS DATABASE SPREADSHEET**

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(ESRI file geodatabase provided electronically)



T-R	CropType	A/Y MU Parcels	A/Y MIN	A/Y MAX	A/Y 10%	A/Y 25%	A/Y 50%	A/Y 75%	A/Y 90%	A/Y Outliers
05N03E	ALFALFA	3	0		0	0	0	0	0	0
06N01E	ALFALFA	1	0.0036	0.0036						
06N01W	ALFALFA	3	0.0018	0.0031	0.002	0.0023	0.0027	0.0029	0.003	2
06N02E	ALFALFA	12	0.0021	0.0131	0.0021	0.0021	0.0085	0.0096	0.0131	2
06N03E	ALFALFA	7	0	0.0007	0	0	0	0.0004	0.0007	0
06N04E	ALFALFA	11	0	0.0006	0	0	0	0.0004	0.0006	0
07N01E	ALFALFA	24	0	0.0155	0.0003	0.0029	0.0082	0.0102	0.0111	6
07N01W	ALFALFA	2	0.002	0.0032	0.0021	0.0023	0.0026	0.0029	0.0031	2
07N02E	ALFALFA	75	0	0.0337	0	0	0.0049	0.0075	0.0127	8
07N03E	ALFALFA	10	0	0.04	0	0	0.001	0.0109	0.0152	1
08N01E	ALFALFA	6	0.0012	0.01	0.0016	0.002	0.0036	0.0088	0.01	1
08N02E	ALFALFA	23	0	0.27	0	0.001	0.0032	0.0118	0.12	2
08N03E	ALFALFA	1	0	0						
09N01E	ALFALFA	1	0.0015	0.0015						
09N02E	ALFALFA	29	0	0.0053	0	0.0012	0.0015	0.0044	0.0044	2
10N01E	ALFALFA	2	0.0063	0.0071	0.0064	0.0065	0.0067	0.0069	0.007	2
10N01W	ALFALFA	1	0.0019	0.0019						
10N02E	ALFALFA	6	0.0016	0.006	0.0017	0.0022	0.0041	0.0057	0.006	1
10N03E	ALFALFA	4	0	0.0017	0	0	0	0.0004	0.0012	1
11N01E	ALFALFA	1	0.0052	0.0052						
11N02E	ALFALFA	4	0.0016	0.0019	0.0016	0.0017	0.0017	0.0017	0.0018	2
11N03E	ALFALFA	4	0.0017	0.0025	0.0017	0.0017	0.0021	0.0025	0.0025	0
12N02E	ALFALFA	4	0.0015	0.002	0.0015	0.0015	0.0018	0.002	0.002	0
12N03E	ALFALFA	1	0.003	0.003						
13N03E	ALFALFA	1	0.01	0.01						
14N01W	ALFALFA	3	0.0034	0.016	0.0034	0.0034	0.0034	0.0097	0.0135	1
14N02W	ALFALFA	4	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0
14N03E	ALFALFA	3	0.0005	0.0017	0.0005	0.0005	0.0005	0.0011	0.0015	1
15N01W	ALFALFA	5	0.0034	0.016	0.0034	0.0034	0.0034	0.0034	0.011	1
16N01W	ALFALFA	1	0.0028	0.0028						
16N02W	ALFALFA	1	0.002	0.002						
16N04E	ALFALFA	1	0.0025	0.0025						
17N01W	ALFALFA	3	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0.0075	0
17N02W	ALFALFA	2	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053	0.0053	0
18N01W	ALFALFA	6	0.0007	0.0174	0.0013	0.002	0.0025	0.004	0.011	2
19N02W	ALFALFA	1	1	1						
19N03W	ALFALFA	4	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0
20N01W	ALFALFA	5	0.0031	0.0052	0.0031	0.0031	0.0031	0.0031	0.0044	1
20N02W	ALFALFA	1	0.0045	0.0045						
20N03W	ALFALFA	6	0	0.0173	0.001	0.002	0.002	0.0103	0.0152	2
Unknown	ALFALFA	2	0.0013	0.0044	0.0016	0.0021	0.0028	0.0036	0.0041	2
07N01E	ALMONDS	22	0	0.2173	0.0049	0.054	0.1092	0.1149	0.1604	6
07N01W	ALMONDS	2	0.075	0.1279	0.0803	0.0882	0.1015	0.1147	0.1226	2
07N02E	ALMONDS	22	0.0917	0.3433	0.0924	0.1031	0.1069	0.1306	0.1398	6
08N01E	ALMONDS	7	0.0867	0.2854	0.0867	0.0867	0.1468	0.2159	0.2795	1
08N03E	ALMONDS	1	0.01	0.01						
09N01E	ALMONDS	1	0.113	0.113						
09N02E	ALMONDS	5	0.04	0.9	0.0692	0.113	0.12	0.9	0.9	1

T-R	CropType	A/Y MU Parcels	A/Y MIN	A/Y MAX	A/Y 10%	A/Y 25%	A/Y 50%	A/Y 75%	A/Y 90%	A/Y Outliers
10N01E	ALMONDS	1	0.11	0.11						
10N01W	ALMONDS	9	0.03	0.3	0.07	0.1	0.1067	0.11	0.1746	2
10N02E	ALMONDS	7	0.03	0.1	0.042	0.054	0.08	0.085	0.094	2
11N01E	ALMONDS	1	0.09	0.09						
12N01W	ALMONDS	7	0.0728	0.104	0.0831	0.09	0.09	0.09	0.0956	2
13N01W	ALMONDS	9	0.078	0.1	0.0796	0.08	0.0822	0.096	0.0968	2
13N02W	ALMONDS	19	0.0486	0.1867	0.0673	0.09	0.102	0.11	0.116	4
14N02W	ALMONDS	3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
14N03E	ALMONDS	4	0.015	75	0.0795	0.1763	0.23	18.9225	52.569	2
14N05E	ALMONDS	4	0.186	0.23	0.186	0.186	0.186	0.197	0.2168	1
15N02E	ALMONDS	4	0.025	0.05	0.0295	0.0362	0.04	0.0425	0.047	2
15N02W	ALMONDS	3	0.0528	0.089	0.0528	0.0528	0.0528	0.0709	0.0818	1
15N03E	ALMONDS	5	0.017	288	0.0598	0.124	0.138	0.14	172.856	2
15N03W	ALMONDS	4	0.1105	0.1188	0.1105	0.1105	0.1105	0.1126	0.1163	1
16N02W	ALMONDS	4	0.061	0.061	0.061	0.061	0.061	0.061	0.061	0
17N02W	ALMONDS	2	0.104	0.104	0.104	0.104	0.104	0.104	0.104	0
19N01W	ALMONDS	2	0.1033	0.1532	0.1083	0.1158	0.1282	0.1407	0.1482	2
20N01E	ALMONDS	39	0.0003	0.21	0.0003	0.0003	0.078	0.1	0.1042	4
20N01W	ALMONDS	14	0.013	0.1694	0.0566	0.0758	0.1013	0.1448	0.1532	3
20N02E	ALMONDS	27	0.0438	137	0.065	0.067	0.08	0.094	0.1454	6
20N03W	ALMONDS	18	0.058	0.132	0.061	0.085	0.085	0.1055	0.117	4
20N04W	ALMONDS	3	0.052	0.052	0.052	0.052	0.052	0.052	0.052	0
21N01E	ALMONDS	153	0.0016	0.95	0.0288	0.057	0.083	0.1139	0.13	31
21N01W	ALMONDS	16	0	1	0	0.0632	0.0945	0.1	0.128	2
21N02E	ALMONDS	51	0.013	80	0.051	0.067	0.094	0.1174	0.123	8
21N02W	ALMONDS	41	0.033	0.1687	0.075	0.0968	0.103	0.14	0.1452	5
21N03W	ALMONDS	91	0.051	1	0.087	0.1	0.12	0.1275	0.21	18
21N04W	ALMONDS	10	0.144	0.1856	0.144	0.144	0.144	0.144	0.1482	1
22N01E	ALMONDS	30	0.0116	0.41	0.0417	0.054	0.0843	0.106	0.168	6
22N01W	ALMONDS	12	0.0184	0.1036	0.0243	0.065	0.0916	0.0955	0.1022	4
23N01E	ALMONDS	1	0.1513	0.1513						
23N01W	ALMONDS	44	0.02	0.255	0.053	0.07	0.0925	0.1333	0.21	8
23N02W	ALMONDS	11	0.04	0.172	0.056	0.0735	0.095	0.1058	0.135	2
24N03W	ALMONDS	1	0.096	0.096						
25N02W	ALMONDS	2	0.065	0.065	0.065	0.065	0.065	0.065	0.065	0
25N03W	ALMONDS	1	0.065	0.065						
27N03W	ALMONDS	2	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0
Unknown	ALMONDS	3	0.03	0.21	0.03	0.03	0.03	0.12	0.174	1
All Records	APPLES	5	0	0.0027	0.0005	0.0012	0.0019	0.0024	0.0026	2
All Records	ASPARAGUS	3	0.052	0.97	0.0997	0.1712	0.2904	0.6302	0.8341	2
07N01E	BEANS - DRY	5	0.0451	0.0813	0.0567	0.0741	0.0741	0.0741	0.0784	2
07N02E	BEANS - DRY	9	0.0146	0.06	0.0253	0.03	0.0441	0.0464	0.06	1
08N01E	BEANS - DRY	7	0.0229	0.029	0.0233	0.0241	0.0248	0.028	0.0288	2
08N02E	BEANS - DRY	2	0.0469	0.0469	0.0469	0.0469	0.0469	0.0469	0.0469	0
10N01E	BEANS - DRY	3	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0
10N02E	BEANS - DRY	3	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0
11N02E	BEANS - DRY	4	0.0305	0.0317	0.0309	0.0314	0.0317	0.0317	0.0317	1
11N03E	BEANS - DRY	8	0.0018	0.1	0.0113	0.0193	0.0217	0.0227	0.0459	2

T-R	CropType	A/Y MU Parcels	A/Y MIN	A/Y MAX	A/Y 10%	A/Y 25%	A/Y 50%	A/Y 75%	A/Y 90%	A/Y Outliers
12N02E	BEANS - DRY	2	0.0166	0.0167	0.0166	0.0166	0.0166	0.0167	0.0167	2
13N01E	BEANS - DRY	2	0.0073	0.0147	0.008	0.0092	0.011	0.0128	0.014	2
13N02E	BEANS - DRY	1	0.06	0.06						
14N01E	BEANS - DRY	1	0.033	0.033						
15N01W	BEANS - DRY	2	0.1062	0.1062	0.1062	0.1062	0.1062	0.1062	0.1062	0
15N02W	BEANS - DRY	2	0.0333	0.0333	0.0333	0.0333	0.0333	0.0333	0.0333	0
16N01W	BEANS - DRY	1	0.0692	0.0692						
17N01W	BEANS - DRY	3	0.0067	0.082	0.0074	0.0085	0.0102	0.0461	0.0676	2
17N02W	BEANS - DRY	2	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0
18N01W	BEANS - DRY	5	0.0067	0.0221	0.0081	0.0102	0.0155	0.019	0.0209	2
05N05E	CORN - FODDER/SILAGE	3	0.0031	0.0042	0.0032	0.0033	0.0035	0.0038	0.0041	2
06N03E	CORN - FODDER/SILAGE	2	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0
07N01E	CORN - FODDER/SILAGE	1	0.0062	0.0062						
08N02E	CORN - FODDER/SILAGE	2	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0.0042	0
08N03E	CORN - FODDER/SILAGE	2	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0.0167	0
09N01E	CORN - FODDER/SILAGE	3	0.0005	0.0202	0.0005	0.0005	0.0005	0.0104	0.0163	1
09N02E	CORN - FODDER/SILAGE	7	0.0006	0.0224	0.0084	0.0142	0.0153	0.0191	0.0218	2
10N01E	CORN - FODDER/SILAGE	4	0.0127	0.0167	0.0127	0.0128	0.0128	0.0138	0.0155	2
10N02E	CORN - FODDER/SILAGE	2	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0
11N02E	CORN - FODDER/SILAGE	2	0.0214	0.0231	0.0216	0.0218	0.0222	0.0227	0.0229	2
11N03E	CORN - FODDER/SILAGE	4	0.0199	0.0227	0.0207	0.0218	0.0225	0.0226	0.0227	2
13N02E	CORN - FODDER/SILAGE	1	0.0208	0.0208						
05N03E	CORN - GRAIN	1	0.0179	0.0179						
06N02E	CORN - GRAIN	4	0.0202	0.0457	0.0202	0.0202	0.0202	0.0266	0.038	1
06N04E	CORN - GRAIN	3	0.0156	0.022	0.0168	0.0186	0.0217	0.0218	0.0219	2
07N01E	CORN - GRAIN	2	0.0229	0.5896	0.0796	0.1646	0.3062	0.4479	0.5329	2
07N02E	CORN - GRAIN	9	0.0027	0.038	0.0027	0.0214	0.0335	0.0366	0.0369	1
08N01E	CORN - GRAIN	1	0.0202	0.0202						
08N02E	CORN - GRAIN	4	0.0033	0.0217	0.0082	0.0155	0.0196	0.0201	0.0211	2
08N03E	CORN - GRAIN	2	0.0406	0.056	0.0421	0.0444	0.0483	0.0522	0.0545	2
08N04E	CORN - GRAIN	7	0.0094	0.0094	0.0094	0.0094	0.0094	0.0094	0.0094	0
10N02E	CORN - GRAIN	3	0.0149	0.0323	0.0167	0.0193	0.0237	0.028	0.0306	2
10N03E	CORN - GRAIN	4	0.0013	0.0237	0.0013	0.0013	0.0125	0.0237	0.0237	0
11N02E	CORN - GRAIN	2	0.0118	0.0118	0.0118	0.0118	0.0118	0.0118	0.0118	0
11N03E	CORN - GRAIN	4	0.0123	0.029	0.0155	0.0203	0.0246	0.0268	0.0281	2
12N02E	CORN - GRAIN	4	0.0069	0.0208	0.0069	0.0069	0.0138	0.0208	0.0208	0
12N03E	CORN - GRAIN	1	0.018	0.018						
13N02E	CORN - GRAIN	2	0.0211	0.0219	0.0212	0.0213	0.0215	0.0217	0.0218	2
14N01W	CORN - GRAIN	4	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196	0.0196	0
15N01W	CORN - GRAIN	7	0.0208	0.023	0.0221	0.023	0.023	0.023	0.023	1
15N03W	CORN - GRAIN	1	0.0172	0.0172						
16N02W	CORN - GRAIN	1	0.0172	0.0172						
18N01W	CORN - GRAIN	7	0.0219	0.0247	0.0236	0.0247	0.0247	0.0247	0.0247	1
19N01W	CORN - GRAIN	2	0.019	0.0247	0.0196	0.0204	0.0218	0.0233	0.0241	2
20N03W	CORN - GRAIN	27	0.003	0.0255	0.003	0.0044	0.005	0.0255	0.0255	0
21N03W	CORN - GRAIN	2	0.0063	0.025	0.0082	0.011	0.0156	0.0203	0.0231	2
All Records	CUCUMBER	19	0.0049	0.0104	0.0053	0.0068	0.0075	0.0078	0.0092	4
All Records	GARLIC	12	0.0174	0.0585	0.0174	0.0174	0.0222	0.0303	0.0355	1

T-R	CropType	A/Y MU Parcels	A/Y MIN	A/Y MAX	A/Y 10%	A/Y 25%	A/Y 50%	A/Y 75%	A/Y 90%	A/Y Outliers
05N05E	GRAPE	4	0.0032	0.0032	0.0032	0.0032	0.0032	0.0032	0.0032	0
06N03E	GRAPE	27	0.0002	0.0092	0.0002	0.0006	0.002	0.0024	0.0035	3
06N04E	GRAPE	59	0.0001	0.0092	0.0005	0.0021	0.0021	0.0033	0.0041	7
08N02E	GRAPE	2	0.0009	0.0021	0.001	0.0012	0.0015	0.0018	0.002	2
09N02E	GRAPE	2	0.0001	0.0024	0.0003	0.0007	0.0012	0.0018	0.0022	2
21N03W	GRAPE	2	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0.0018	0
All Records	HAY/FORAGE	10	0	0.033	0	0.0014	0.0073	0.0226	0.0276	1
All Records	KIWI	16	0.0001	0.052	0.0004	0.0067	0.0081	0.0134	0.041	3
All Records	MELON	8	0.0034	0.0133	0.0045	0.005	0.005	0.0071	0.0133	1
All Records	MILO/SORGHUM	9	0.001	0.21	0.0162	0.0205	0.0267	0.0267	0.0715	2
All Records	MISC FRUIT TREES	7	0.0159	0.078	0.02	0.0227	0.0227	0.0227	0.0448	2
All Records	MISC VEGETABLES	11	0	60	0	0.015	0.0195	0.4206	60	0
All Records	OATS	12	0	0.0417	0.002	0.002	0.0052	0.0088	0.0385	3
08N01E	OLIVE	1	0	0						
08N02W	OLIVE	1	0.1455	0.1455						
09N02E	OLIVE	2	0.0007	0.0178	0.0024	0.005	0.0092	0.0135	0.0161	2
15N01W	OLIVE	1	0.002	0.002						
15N02E	OLIVE	1	0.002	0.002						
16N02W	OLIVE	1	0.0026	0.0026						
17N04E	OLIVE	1	0.0097	0.0097						
20N02W	OLIVE	2	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0
20N03W	OLIVE	14	0.0036	0.0155	0.0046	0.0054	0.0086	0.0117	0.0155	1
20N04W	OLIVE	14	0.0043	0.013	0.01	0.0104	0.0116	0.0118	0.0118	2
21N03W	OLIVE	26	0.0026	0.0455	0.0046	0.0057	0.0122	0.0249	0.031	6
21N04W	OLIVE	1	0.0082	0.0082						
24N03W	OLIVE	7	0.0005	0.0686	0.0005	0.0005	0.0005	0.019	0.04	1
All Records	PASTURE	10	0.0071	0.625	0.0071	0.0071	0.0086	0.0171	0.4844	1
13N02W	PEACH	1	0.3	0.3						
13N03E	PEACH	8	0.0002	0.0113	0.0003	0.0004	0.0027	0.0027	0.0053	2
13N05E	PEACH	2	0.0026	0.0048	0.0028	0.0032	0.0037	0.0042	0.0046	2
14N03E	PEACH	11	0.0008	0.0063	0.0026	0.0027	0.0063	0.0063	0.0063	1
15N03E	PEACH	7	0.003	0.0063	0.0032	0.0034	0.0036	0.0051	0.0063	1
15N04E	PEACH	3	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0.0033	0
16N03E	PEACH	12	0.0019	0.008	0.0019	0.0022	0.0031	0.0037	0.005	3
17N03E	PEACH	15	0.0017	0.0067	0.0028	0.0031	0.004	0.006	0.0064	4
26N02W	PEACH	1	0.0025	0.0025						
Unknown	PEACH	1	0.0028	0.0028						
05N05E	PEAR	2	0.0033	0.0072	0.0037	0.0043	0.0052	0.0062	0.0068	2
06N04E	PEAR	22	0.0008	0.0054	0.0009	0.0009	0.0013	0.0017	0.0037	5
13N03E	PEAR	2	0.0041	0.0048	0.0042	0.0043	0.0044	0.0046	0.0047	2
16N01W	PECAN	2	0.1278	0.1278	0.1278	0.1278	0.1278	0.1278	0.1278	0
21N03W	PECAN	1	0.057	0.057						
07N02E	PEPPERS	7	0.0051	0.0076	0.0051	0.0054	0.0069	0.0074	0.0076	0
07N03E	PEPPERS	1	0.0093	0.0093						
08N01E	PEPPERS	2	0.0071	0.0105	0.0074	0.008	0.0088	0.0096	0.0102	2
08N02E	PEPPERS	5	0.0002	0.0086	0.0028	0.0066	0.0066	0.0075	0.0082	2
10N02E	PEPPERS	1	0.0049	0.0049						
10N03E	PEPPERS	1	0.0063	0.0063						



T-R	CropType	A/Y MU Parcels	A/Y MIN	A/Y MAX	A/Y 10%	A/Y 25%	A/Y 50%	A/Y 75%	A/Y 90%	A/Y Outliers
14N01E	SAFFLOWER	2	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0
14N03E	SAFFLOWER	1	0.069	0.069						
15N01W	SAFFLOWER	1	0.08	0.08						
16N01W	SAFFLOWER	3	0.0667	0.0667	0.0667	0.0667	0.0667	0.0667	0.0667	0
All Records	SQUASH	6	0.0029	0.01	0.0034	0.0042	0.0047	0.0052	0.0076	2
All Records	SQUASH SEED	6	0.09	3.039	0.1977	0.3087	0.3182	0.3182	1.6786	2
20N03W	STRAWBERRIES	1	0.0013	0.0013						
21N03W	STRAWBERRIES	1	0.0006	0.0006						
All Records	SUDAN GRASS	11	0.0119	0.0156	0.0119	0.0134	0.0152	0.0156	0.0156	0
06N01W	SUNFLOWER	4	0.0883	0.1267	0.0944	0.1036	0.1087	0.1132	0.1213	2
07N01E	SUNFLOWER	14	0.0902	0.1803	0.1151	0.1279	0.1375	0.1381	0.1607	4
07N01W	SUNFLOWER	1	0.0625	0.0625						
07N02E	SUNFLOWER	36	0.024	0.1312	0.0372	0.0435	0.0543	0.0686	0.1084	6
07N03E	SUNFLOWER	4	0.0533	0.0863	0.0592	0.0682	0.0792	0.0855	0.086	2
08N01E	SUNFLOWER	12	0.0474	0.1855	0.0474	0.0522	0.111	0.1312	0.156	2
08N02E	SUNFLOWER	33	0.0378	0.1552	0.0429	0.0451	0.0547	0.0635	0.0737	8
08N03E	SUNFLOWER	1	0.0533	0.0533						
09N01E	SUNFLOWER	6	0.06	0.1333	0.065	0.0725	0.085	0.09	0.1116	2
09N02E	SUNFLOWER	29	0.0283	0.2533	0.0466	0.0635	0.1	0.1	0.1227	6
09N03E	SUNFLOWER	3	0.0533	0.0533	0.0533	0.0533	0.0533	0.0533	0.0533	0
10N01E	SUNFLOWER	5	0.06	0.17	0.0628	0.067	0.067	0.067	0.1288	2
10N02E	SUNFLOWER	18	0.0435	0.18	0.0544	0.059	0.065	0.09	0.124	4
10N02W	SUNFLOWER	1	0.17	0.17						
10N03E	SUNFLOWER	7	0.0533	0.0867	0.0533	0.0566	0.067	0.0735	0.0827	1
11N01E	SUNFLOWER	1	0.0663	0.0663						
11N02E	SUNFLOWER	4	0.059	0.1	0.059	0.059	0.0795	0.1	0.1	0
11N03E	SUNFLOWER	14	0.0375	12.7273	0.0464	0.075	0.0798	0.0816	0.1765	4
12N01W	SUNFLOWER	2	0.0635	0.186	0.0758	0.0941	0.1248	0.1554	0.1737	2
12N02E	SUNFLOWER	14	0.033	0.089	0.0409	0.0593	0.06	0.0764	0.083	3
13N02E	SUNFLOWER	2	0.078	0.09	0.0792	0.081	0.084	0.087	0.0888	2
14N01W	SUNFLOWER	6	0.0625	0.09	0.0688	0.0752	0.076	0.076	0.083	2
15N01W	SUNFLOWER	8	0.0523	0.1687	0.0619	0.066	0.0872	0.1687	0.1687	1
15N02W	SUNFLOWER	1	0.1111	0.1111						
15N03W	SUNFLOWER	1	0.1111	0.1111						
16N02W	SUNFLOWER	3	0.1433	0.1433	0.1433	0.1433	0.1433	0.1433	0.1433	0
17N01W	SUNFLOWER	5	0.073	0.088	0.079	0.088	0.088	0.088	0.088	1
17N02W	SUNFLOWER	1	0.13	0.13						
17N03W	SUNFLOWER	1	0.0435	0.0435						
18N01W	SUNFLOWER	6	0.0667	1	0.5334	1	1	1	1	1
19N01W	SUNFLOWER	1	0.0833	0.0833						
20N01W	SUNFLOWER	1	0.028	0.028						
20N02W	SUNFLOWER	1	0.03	0.03						
21N01E	SUNFLOWER	1	0.08	0.08						
21N01W	SUNFLOWER	1	0.028	0.028						
Unknown	SUNFLOWER	1	0.0522	0.0522						
All Records	TOMATO - FRESH	6	0.0018	0.01	0.0023	0.0046	0.0096	0.0096	0.0098	2
06N01W	TOMATO - PROCESSING	2	0.0028	0.0031	0.0028	0.0029	0.003	0.003	0.0031	2
06N03E	TOMATO - PROCESSING	1	0.0022	0.0022						

T-R	CropType	A/Y MU Parcels	A/Y MIN	A/Y MAX	A/Y 10%	A/Y 25%	A/Y 50%	A/Y 75%	A/Y 90%	A/Y Outliers
06N04E	TOMATO - PROCESSING	2	0.0017	0.0021	0.0017	0.0018	0.0019	0.002	0.0021	2
07N01E	TOMATO - PROCESSING	23	0.0018	0.0041	0.002	0.002	0.0028	0.0033	0.004	4
07N02E	TOMATO - PROCESSING	47	0.0016	0.0052	0.0017	0.002	0.0022	0.0026	0.0028	9
07N03E	TOMATO - PROCESSING	1	0.0017	0.0017						
08N01E	TOMATO - PROCESSING	50	0.0012	0.0049	0.0017	0.0018	0.002	0.002	0.0023	8
08N02E	TOMATO - PROCESSING	42	0.0004	0.003	0.0015	0.0017	0.0021	0.0024	0.0026	5
08N03E	TOMATO - PROCESSING	62	0.001	0.0076	0.0012	0.0017	0.0019	0.0022	0.003	8
08N04E	TOMATO - PROCESSING	2	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0
09N01E	TOMATO - PROCESSING	8	0.0014	0.0035	0.0014	0.0014	0.0022	0.0024	0.0029	1
09N02E	TOMATO - PROCESSING	39	0.0011	0.0035	0.0017	0.002	0.0024	0.0028	0.0029	7
09N03E	TOMATO - PROCESSING	2	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0.0017	0
10N01E	TOMATO - PROCESSING	3	0.0016	0.0029	0.0017	0.0018	0.002	0.0024	0.0027	2
10N01W	TOMATO - PROCESSING	5	0.0016	0.0023	0.0016	0.0016	0.0016	0.0021	0.0022	1
10N02E	TOMATO - PROCESSING	19	0.0001	0.0031	0.0017	0.0018	0.0024	0.0028	0.0031	5
10N03E	TOMATO - PROCESSING	10	0.0017	0.0045	0.0019	0.002	0.0022	0.0024	0.0027	2
11N01E	TOMATO - PROCESSING	1	0.0027	0.0027						
11N02E	TOMATO - PROCESSING	5	0.0015	0.0024	0.0018	0.0022	0.0024	0.0024	0.0024	1
11N03E	TOMATO - PROCESSING	16	0.0016	0.0027	0.0018	0.0018	0.002	0.0027	0.0027	1
12N01W	TOMATO - PROCESSING	6	0.0018	0.0019	0.0018	0.0018	0.0019	0.0019	0.0019	0
12N02E	TOMATO - PROCESSING	9	0.0009	0.0028	0.0009	0.0015	0.0019	0.002	0.0028	0
13N01E	TOMATO - PROCESSING	1	0.0001	0.0001						
13N01W	TOMATO - PROCESSING	1	0.0017	0.0017						
13N02E	TOMATO - PROCESSING	1	0.003	0.003						
13N03E	TOMATO - PROCESSING	3	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0
14N01E	TOMATO - PROCESSING	4	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0
14N01W	TOMATO - PROCESSING	5	0.0019	0.0023	0.0019	0.0019	0.0019	0.0023	0.0023	0
14N02E	TOMATO - PROCESSING	1	0.0015	0.0015						
14N03E	TOMATO - PROCESSING	7	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0.0012	0
15N01W	TOMATO - PROCESSING	10	0.0018	0.0023	0.0018	0.002	0.0021	0.0022	0.0023	0
15N02W	TOMATO - PROCESSING	7	0.0019	0.0035	0.002	0.002	0.002	0.0028	0.0035	1
15N03W	TOMATO - PROCESSING	6	0.0014	0.0032	0.0014	0.0016	0.0021	0.0021	0.0026	1
16N01W	TOMATO - PROCESSING	5	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0.0029	0
16N02W	TOMATO - PROCESSING	2	0.0019	0.0029	0.002	0.0022	0.0024	0.0026	0.0028	2
17N02W	TOMATO - PROCESSING	1	0.003	0.003						
18N01W	TOMATO - PROCESSING	2	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0.0026	0
19N01W	TOMATO - PROCESSING	2	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0.0027	0
20N02W	TOMATO - PROCESSING	2	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0
Unknown	TOMATO - PROCESSING	1	0.0016	0.0016						
All Records	TRITICALE	12	0.0083	0.0377	0.0088	0.0102	0.0125	0.0188	0.0377	2
07N02E	VINE SEED	4	0.0099	0.4663	0.1468	0.3522	0.4663	0.4663	0.4663	1
08N02E	VINE SEED	1	0.6139	0.6139						
08N03E	VINE SEED	1	0.08	0.08						
09N02E	VINE SEED	1	0.71	0.71						
11N01E	VINE SEED	2	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0
11N03E	VINE SEED	1	0.056	0.056						
12N01W	VINE SEED	4	0.16	0.37	0.16	0.16	0.265	0.37	0.37	0
12N02E	VINE SEED	8	0.0725	2.08	0.0725	0.0725	0.0758	2.08	2.08	0
13N01W	VINE SEED	1	0.22	0.22						

T-R	CropType	A/Y MU Parcels	A/Y MIN	A/Y MAX	A/Y 10%	A/Y 25%	A/Y 50%	A/Y 75%	A/Y 90%	A/Y Outliers
13N02E	VINE SEED	1	0.416	0.416						
14N01E	VINE SEED	2	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0
15N01W	VINE SEED	9	0.2357	1.0065	0.2357	0.5331	0.5331	1	1.0013	1
15N02W	VINE SEED	1	1.129	1.129						
16N01W	VINE SEED	1	1	1						
16N02W	VINE SEED	1	1	1						
17N01W	VINE SEED	1	0.32	0.32						
17N03W	VINE SEED	1	0.222	0.222						
19N01W	VINE SEED	1	0.125	0.125						
21N01E	VINE SEED	1	0.45	0.45						
07N01E	WALNUTS	24	0	0.0856	0.0015	0.0232	0.0353	0.0472	0.0696	4
08N01E	WALNUTS	7	0	0.0431	0	0	0.0072	0.021	0.0382	1
08N02E	WALNUTS	2	0	0	0	0	0	0	0	0
08N02W	WALNUTS	3	0.0328	0.0328	0.0328	0.0328	0.0328	0.0328	0.0328	0
08N03E	WALNUTS	3	0.0246	0.0246	0.0246	0.0246	0.0246	0.0246	0.0246	0
09N01E	WALNUTS	3	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0
09N02E	WALNUTS	2	0.0289	0.0494	0.031	0.034	0.0392	0.0443	0.0473	2
10N01E	WALNUTS	1	0.086	0.086						
10N01W	WALNUTS	6	0.0257	0.08	0.0263	0.0299	0.0492	0.0748	0.08	1
10N02E	WALNUTS	11	0.015	0.051	0.025	0.0261	0.0347	0.046	0.051	1
10N03E	WALNUTS	4	0.0255	0.064	0.0255	0.0255	0.0442	0.0632	0.0637	1
11N02E	WALNUTS	6	0.0006	0.1	0.0053	0.0138	0.0327	0.04	0.07	2
11N03E	WALNUTS	1	0.1	0.1						
12N01E	WALNUTS	1	0.0167	0.0167						
12N01W	WALNUTS	2	0.0173	0.05	0.0206	0.0255	0.0336	0.0418	0.0467	2
12N02E	WALNUTS	7	0.0167	0.072	0.0167	0.0167	0.0167	0.0244	0.048	1
12N03E	WALNUTS	7	0.0012	0.0275	0.0012	0.0012	0.0012	0.0272	0.0275	0
12N03W	WALNUTS	1	0.0759	0.0759						
13N01E	WALNUTS	8	0.03	0.091	0.03	0.03	0.054	0.0812	0.091	0
13N02E	WALNUTS	1	0.015	0.015						
13N03E	WALNUTS	33	0.0008	0.2625	0.0012	0.002	0.0365	0.115	0.2625	4
13N04E	WALNUTS	64	0.0088	2.5	0.0145	0.0275	0.0335	0.0375	0.0425	11
13N05E	WALNUTS	21	0.0013	0.0448	0.018	0.02	0.03	0.033	0.0448	2
14N01E	WALNUTS	6	0.02	0.033	0.0207	0.0218	0.0278	0.0328	0.033	1
14N01W	WALNUTS	5	0.019	1	0.019	0.019	0.019	0.019	0.6076	1
14N03E	WALNUTS	37	0.0008	0.24	0.0045	0.0144	0.0313	0.0375	0.093	7
14N04E	WALNUTS	4	0.0347	0.0375	0.0347	0.0347	0.0347	0.0354	0.0367	1
14N05E	WALNUTS	12	0	0.089	0.0008	0.0082	0.0111	0.0459	0.0459	3
15N01E	WALNUTS	6	0.0235	0.04	0.0235	0.0276	0.04	0.04	0.04	0
15N01W	WALNUTS	12	0.025	0.057	0.0254	0.029	0.0535	0.057	0.057	2
15N02E	WALNUTS	10	0.0142	0.1	0.0156	0.0226	0.0313	0.0616	0.1	1
15N03E	WALNUTS	26	0.0038	0.13	0.0135	0.0253	0.0322	0.0429	0.0883	6
15N04E	WALNUTS	12	0.008	0.0476	0.031	0.031	0.0363	0.0375	0.0402	3
16N01W	WALNUTS	31	0.0175	1	0.018	0.0275	0.04	0.091	1	1
16N02W	WALNUTS	5	0.0127	0.0438	0.0127	0.0127	0.0172	0.0172	0.0332	1
16N03E	WALNUTS	30	0.0013	0.0558	0.0107	0.015	0.0221	0.029	0.0469	6
16N04E	WALNUTS	7	0.0375	31	0.0375	0.0375	0.0375	0.0375	12.4225	1
17N01W	WALNUTS	7	0.02	0.06	0.02	0.04	0.06	0.06	0.06	0





T-R	CropType	A/Y MU Parcels	A/Y MIN	A/Y MAX	A/Y 10%	A/Y 25%	A/Y 50%	A/Y 75%	A/Y 90%	A/Y Outliers
13N01E	WHEAT	3	0.018	0.029	0.018	0.018	0.018	0.0235	0.0268	1
13N02E	WHEAT	4	0.075	14.331	0.3525	0.7688	1.31	4.7978	10.5177	2
13N03E	WHEAT	1	0.0336	0.0336						
14N01E	WHEAT	8	0.021	570.4	0.021	0.021	0.021	1	171.82	1
14N01W	WHEAT	10	0.0004	0.0625	0.0004	0.0176	0.037	0.0625	0.0625	0
15N01W	WHEAT	5	0.0243	0.6509	0.0255	0.0274	0.0298	0.0298	0.4025	2
15N02W	WHEAT	5	0.0113	0.0113	0.0113	0.0113	0.0113	0.0113	0.0113	0
16N02W	WHEAT	1	0.0259	0.0259						
17N02W	WHEAT	6	0.025	0.032	0.025	0.025	0.0253	0.0304	0.032	0
18N01W	WHEAT	10	0.018	0.0227	0.018	0.018	0.018	0.018	0.0185	1
20N01W	WHEAT	1	0.0018	0.0018						
20N03W	WHEAT	15	0.0017	0.04	0.0017	0.0273	0.04	0.04	0.04	0
21N01E	WHEAT	1	0.0333	0.0333						

T-R	CropType	A/R MU Parcels	A/R MIN	A/R MAX	A/R 10%	A/R 25%	A/R 50%	A/R 75%	A/R 90%	A/R Outliers
05N03E	ALFALFA	3	0	0	0	0	0	0	0	0
06N01E	ALFALFA	1	0.1141	0.1141						
06N01W	ALFALFA	3	0.0584	0.0988	0.0638	0.072	0.0856	0.0922	0.0962	2
06N02E	ALFALFA	12	0.0669	0.4218	0.0669	0.0678	0.273	0.3083	0.4206	2
06N03E	ALFALFA	7	0	0.0209	0	0	0	0.0104	0.0209	0
06N04E	ALFALFA	11	0	0.0183	0	0	0	0.0144	0.0183	0
07N01E	ALFALFA	24	0	0.4975	0.0109	0.0931	0.263	0.3283	0.3547	6
07N01W	ALFALFA	2	0.0642	0.1027	0.068	0.0738	0.0834	0.0931	0.0988	2
07N02E	ALFALFA	75	0	1.0815	0	0	0.1578	0.2407	0.4069	8
07N03E	ALFALFA	10	0	1.2841	0	0	0.0334	0.3491	0.489	1
08N01E	ALFALFA	6	0.0379	0.3225	0.0518	0.0657	0.1184	0.2847	0.3225	1
08N02E	ALFALFA	23	0	8.6677	0	0.0349	0.103	0.3784	3.8523	2
08N03E	ALFALFA	1	0	0						
09N01E	ALFALFA	1	0.0482	0.0482						
09N02E	ALFALFA	29	0	0.1712	0	0.0397	0.0468	0.1413	0.1413	2
10N01E	ALFALFA	2	0.2006	0.2279	0.2033	0.2074	0.2142	0.2211	0.2252	2
10N01W	ALFALFA	1	0.0621	0.0621						
10N02E	ALFALFA	6	0.0503	0.1912	0.0547	0.0724	0.1312	0.1809	0.1912	1
10N03E	ALFALFA	4	0	0.0542	0	0	0	0.0136	0.0379	1
11N01E	ALFALFA	1	0.1653	0.1653						
11N02E	ALFALFA	4	0.051	0.0621	0.052	0.0534	0.0542	0.0562	0.0597	2
11N03E	ALFALFA	4	0.0542	0.08	0.0542	0.0542	0.0671	0.08	0.08	0
12N02E	ALFALFA	4	0.048	0.064	0.048	0.048	0.056	0.064	0.064	0
12N03E	ALFALFA	1	0.096	0.096						
13N03E	ALFALFA	1	0.321	0.321						
14N01W	ALFALFA	3	0.1108	1026.9663	0.1108	0.1108	0.1108	513.5386	821.5952	1
14N02W	ALFALFA	4	0.0963	0.0963	0.0963	0.0963	0.0963	0.0963	0.0963	0
14N03E	ALFALFA	3	0.016	0.055	0.016	0.016	0.016	0.0355	0.0472	1
15N01W	ALFALFA	5	0.1108	1026.9663	0.1108	0.1108	0.1108	0.1108	616.2241	1
16N01W	ALFALFA	1	0.0892	0.0892						
16N02W	ALFALFA	1	0.0642	0.0642						
16N04E	ALFALFA	1	0.08	0.08						
17N01W	ALFALFA	3	0.2408	0.2408	0.2408	0.2408	0.2408	0.2408	0.2408	0
17N02W	ALFALFA	2	0.1713	0.1713	0.1713	0.1713	0.1713	0.1713	0.1713	0
18N01W	ALFALFA	5	0.0235	0.1445	0.0382	0.0602	0.0793	0.0793	0.1184	2
19N02W	ALFALFA	1	0.1776	0.1776						
19N03W	ALFALFA	4	0.0562	0.0562	0.0562	0.0562	0.0562	0.0562	0.0562	0
20N01W	ALFALFA	5	0.0979	0.1658	0.0979	0.0979	0.0979	0.0979	0.1386	1
20N02W	ALFALFA	1	0.1445	0.1445						
20N03W	ALFALFA	5	0.0002	0.4198	0.0258	0.0642	0.0642	0.0642	0.2776	2
Unknown	ALFALFA	2	0.04	0.1413	0.0501	0.0653	0.0907	0.116	0.1312	2
07N01E	ALMONDS	22	0	3.1949	0.0714	0.7949	1.6066	1.6897	2.3584	6
07N01W	ALMONDS	2	1.1029	1.8805	1.1807	1.2973	1.4917	1.6861	1.8027	2
07N02E	ALMONDS	22	1.3491	5.0493	1.359	1.5164	1.5717	1.9212	2.0556	6
08N01E	ALMONDS	7	1.2747	4.1976	1.2747	1.2747	2.1585	3.1752	4.1102	1
08N03E	ALMONDS	1	0.1471	0.1471						
09N01E	ALMONDS	1	1.6618	1.6618						
09N02E	ALMONDS	5	0.5882	13.2353	1.0176	1.6618	1.7647	13.2353	13.2353	1

T-R	CropType	A/R MU Parcels	A/R MIN	A/R MAX	A/R 10%	A/R 25%	A/R 50%	A/R 75%	A/R 90%	A/R Outliers
10N01E	ALMONDS	1	1.6176	1.6176						
10N01W	ALMONDS	9	0.4418	4.4118	1.0296	1.4706	1.5695	1.6176	2.5686	2
10N02E	ALMONDS	7	0.4412	1.4706	0.6177	0.7941	1.1765	1.25	1.3823	2
11N01E	ALMONDS	1	1.3235	1.3235						
12N01W	ALMONDS	7	1.0706	1.5294	1.2223	1.3235	1.3235	1.3235	1.4059	2
13N01W	ALMONDS	9	1.1471	1.4706	1.1706	1.1765	1.2093	1.4118	1.4236	2
13N02W	ALMONDS	19	0.7154	2.7449	0.9885	1.3236	1.5	1.6176	1.7058	4
14N02W	ALMONDS	3	1.4706	1.4706	1.4706	1.4706	1.4706	1.4706	1.4706	0
14N03E	ALMONDS	4	3.382	29411.765	3.382	3.382	553.1615	8180.147	20919.1178	1
14N05E	ALMONDS	4	2.735	3.382	2.735	2.735	2.735	2.8968	3.1879	1
15N02E	ALMONDS	4	0.368	0.735	0.434	0.533	0.588	0.6247	0.6909	2
15N02W	ALMONDS	3	0.7761	1.3088	0.7761	0.7761	0.7761	1.0425	1.2023	1
15N03E	ALMONDS	5	0.25	4235.294	0.8796	1.824	2.029	2.059	2542	2
15N03W	ALMONDS	4	1.625	1.7468	1.625	1.625	1.625	1.6554	1.7103	1
16N02W	ALMONDS	4	0.8971	0.8971	0.8971	0.8971	0.8971	0.8971	0.8971	0
17N02W	ALMONDS	2	1.5294	1.5294	1.5294	1.5294	1.5294	1.5294	1.5294	0
19N01W	ALMONDS	2	1.5191	2.2529	1.5925	1.7026	1.886	2.0694	2.1795	2
20N01E	ALMONDS	39	0.004	3.088	0.004	0.004	1.147	1.471	1.532	4
20N01W	ALMONDS	14	0.1913	2.4912	0.8324	1.1147	1.4891	2.1285	2.2529	3
20N02E	ALMONDS	27	0.644	2014.706	0.955	0.985	1.176	1.382	2.1374	6
20N03W	ALMONDS	18	0.8529	1.9412	0.8971	1.25	1.25	1.5514	1.7206	2
20N04W	ALMONDS	3	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647	0
21N01E	ALMONDS	153	0.024	1250	0.4232	0.868	1.265	1.707	1.9304	32
21N01W	ALMONDS	16	0.5882	2.294	0.5882	0.9302	1.3897	1.4706	1.7214	2
21N02E	ALMONDS	51	0.191	1176.471	0.75	1.044	1.394	1.757	1.935	5
21N02W	ALMONDS	41	0.4853	2.4805	1.1029	1.4235	1.5147	2.0588	2.1347	5
21N03W	ALMONDS	91	0.75	3.0882	1.0306	1.3235	1.6793	1.7794	1.9118	10
21N04W	ALMONDS	10	2.1176	2.7292	2.1176	2.1176	2.1176	2.1176	2.1788	1
22N01E	ALMONDS	30	0.171	6.029	0.6129	0.7942	1.24	1.559	2.4707	6
22N01W	ALMONDS	12	0.735	628.529	1.0322	1.27	1.3765	1.5112	487.7409	4
23N01E	ALMONDS	1	2.225	2.225						
23N01W	ALMONDS	44	0.294	3.75	0.7791	1.029	1.3605	1.961	3.088	8
23N02W	ALMONDS	11	0.5882	2.5294	0.8235	1.0808	1.3971	1.5551	1.985	2
24N03W	ALMONDS	1	1.4118	1.4118						
25N02W	ALMONDS	2	0.9559	0.9559	0.9559	0.9559	0.9559	0.9559	0.9559	0
25N03W	ALMONDS	1	0.9559	0.9559						
27N03W	ALMONDS	2	1.0294	1.0294	1.0294	1.0294	1.0294	1.0294	1.0294	0
Unknown	ALMONDS	3	0.441	3.088	0.441	0.441	0.441	1.7645	2.5586	1
All Records	APPLES	5	0	5.0463	0.9259	2.3148	3.5556	4.3981	4.787	2
All Records	ASPARAGUS	3	17.7474	332	34.0176	58.423	99.0985	215.5492	285.4197	2
07N01E	BEANS - DRY	5	1.2472	2.2481	1.5685	2.0505	2.0505	2.0505	2.1691	2
07N02E	BEANS - DRY	9	0.4044	1.6598	0.7002	0.8299	1.2209	1.2846	1.6598	1
08N01E	BEANS - DRY	7	0.6345	0.8018	0.6439	0.6674	0.6847	0.7732	0.7971	2
08N02E	BEANS - DRY	2	1.2971	1.2971	1.2971	1.2971	1.2971	1.2971	1.2971	0
10N01E	BEANS - DRY	3	0.5952	0.5952	0.5952	0.5952	0.5952	0.5952	0.5952	0
10N02E	BEANS - DRY	3	0.5952	0.5952	0.5952	0.5952	0.5952	0.5952	0.5952	0
11N02E	BEANS - DRY	4	476.003	3049.087	476.003	476.003	476.003	1119.274	2277.1618	1
11N03E	BEANS - DRY	8	357.143	2772853.23	701.9322	1424.088	1615.551	1682.082	833033.4264	2

T-R	CropType	A/R MU Parcels	A/R MIN	A/R MAX	A/R 10%	A/R 25%	A/R 50%	A/R 75%	A/R 90%	A/R Outliers
12N02E	BEANS - DRY	2	290835.05	292587.069	291010.2519	291273.0548	291711.0595	292149.0642	292411.8671	2
13N01E	BEANS - DRY	2	22207.348	45027.313	24489.3445	27912.3393	33617.3305	39322.3218	42745.3165	2
13N02E	BEANS - DRY	1	5440.8	5440.8						
14N01E	BEANS - DRY	1	0.9821	0.9821						
15N01W	BEANS - DRY	2	3.1602	3.1602	3.1602	3.1602	3.1602	3.1602	3.1602	0
15N02W	BEANS - DRY	2	0.9921	0.9921	0.9921	0.9921	0.9921	0.9921	0.9921	0
16N01W	BEANS - DRY	1	2.0604	2.0604						
17N01W	BEANS - DRY	3	0.1985	2.4405	0.2195	0.251	0.3036	1.372	2.0131	2
17N02W	BEANS - DRY	2	2.0833	2.0833	2.0833	2.0833	2.0833	2.0833	2.0833	0
18N01W	BEANS - DRY	5	0.1985	0.6565	0.2405	0.3036	0.4626	0.5655	0.6201	2
05N05E	CORN - FODDER/SILAGE	3	0.8267	1.1111	0.8444	0.871	0.9153	1.0132	1.0719	2
06N03E	CORN - FODDER/SILAGE	2	0.7937	0.7937	0.7937	0.7937	0.7937	0.7937	0.7937	0
07N01E	CORN - FODDER/SILAGE	1	1.6534	1.6534						
08N02E	CORN - FODDER/SILAGE	2	1.1243	1.1243	1.1243	1.1243	1.1243	1.1243	1.1243	0
08N03E	CORN - FODDER/SILAGE	2	4.4048	4.4048	4.4048	4.4048	4.4048	4.4048	4.4048	0
09N01E	CORN - FODDER/SILAGE	3	0.1429	5.3519	0.1429	0.1429	0.1429	2.7474	4.3101	1
09N02E	CORN - FODDER/SILAGE	7	0.1534	5.9312	2.2153	3.7454	4.0437	5.0536	5.7725	2
10N01E	CORN - FODDER/SILAGE	4	3.3545	4.4048	3.3652	3.3813	3.3902	3.6438	4.1004	2
10N02E	CORN - FODDER/SILAGE	2	6.3492	6.3492	6.3492	6.3492	6.3492	6.3492	6.3492	0
11N02E	CORN - FODDER/SILAGE	2	5.669	6.1045	5.7126	5.7779	5.8867	5.9956	6.0609	2
11N03E	CORN - FODDER/SILAGE	4	5.271	6.007	5.4654	5.757	5.9425	5.9762	5.9947	2
13N02E	CORN - FODDER/SILAGE	1	5.511	5.511						
05N03E	CORN - GRAIN	1	1.4931	1.4931						
06N02E	CORN - GRAIN	4	1.687	3.8091	1.687	1.687	1.687	2.2175	3.1725	1
06N04E	CORN - GRAIN	3	1.3021	1.8304	1.403	1.5544	1.8067	1.8186	1.8257	2
07N01E	CORN - GRAIN	2	1.9104	49.1369	6.633	13.717	25.5236	37.3303	44.4142	2
07N02E	CORN - GRAIN	9	0.2273	3.1683	0.2273	1.7872	2.7917	3.0464	3.0708	1
08N01E	CORN - GRAIN	1	1.6846	1.6846						
08N02E	CORN - GRAIN	4	0.2778	1.8125	0.6848	1.2954	1.6346	1.6791	1.7591	2
08N03E	CORN - GRAIN	2	3.381	4.6667	3.5096	3.7024	4.0238	4.3453	4.5381	2
08N04E	CORN - GRAIN	7	0.7812	0.7812	0.7812	0.7812	0.7812	0.7812	0.7812	0
10N02E	CORN - GRAIN	3	1.2381	2.6944	1.3849	1.6052	1.9722	2.3333	2.55	2
10N03E	CORN - GRAIN	4	0.1096	1.9722	0.1096	0.1096	1.0409	1.9722	1.9722	0
11N02E	CORN - GRAIN	2	0.9861	0.9861	0.9861	0.9861	0.9861	0.9861	0.9861	0
11N03E	CORN - GRAIN	4	1.025	2.419	1.2926	1.694	2.046	2.236	2.3458	2
12N02E	CORN - GRAIN	4	0.575	1.736	0.575	0.575	1.1555	1.736	1.736	0
12N03E	CORN - GRAIN	1	1.5	1.5						
13N02E	CORN - GRAIN	2	1.759	1.825	1.7656	1.7755	1.792	1.8085	1.8184	2
14N01W	CORN - GRAIN	4	1.6369	1.6369	1.6369	1.6369	1.6369	1.6369	1.6369	0
15N01W	CORN - GRAIN	7	1.7361	1.9167	1.8445	1.9167	1.9167	1.9167	1.9167	1
15N03W	CORN - GRAIN	1	1.4323	1.4323						
16N02W	CORN - GRAIN	1	1.4323	1.4323						
18N01W	CORN - GRAIN	7	1.8229	2.0599	1.9651	2.0599	2.0599	2.0599	2.0599	1
19N01W	CORN - GRAIN	2	1.5833	2.0599	1.631	1.7024	1.8216	1.9408	2.0122	2
20N03W	CORN - GRAIN	27	0.7937	2.125	0.7937	1.1606	1.3122	2.125	2.125	0
21N03W	CORN - GRAIN	2	1.6746	2.0833	1.7155	1.7768	1.879	1.9811	2.0424	2
All Records	CUCUMBER	19	4.5417	9.6309	4.9167	6.2824	6.9444	7.269	8.4603	4
All Records	GARLIC	12	2.298	7.7471	2.298	2.298	2.9383	4.0187	4.6966	1

T-R	CropType	A/R MU Parcels	A/R MIN	A/R MAX	A/R 10%	A/R 25%	A/R 50%	A/R 75%	A/R 90%	A/R Outliers
05N05E	GRAPE	4	1.8028	1.8028	1.8028	1.8028	1.8028	1.8028	1.8028	0
06N03E	GRAPE	27	0.1	5.1019	0.1	0.3584	1.0833	1.2986	1.9444	3
06N04E	GRAPE	59	0.0611	5.1019	0.2722	1.1528	1.1528	1.8402	2.25	10
08N02E	GRAPE	2	0.5185	1.1574	0.5824	0.6782	0.838	0.9977	1.0935	2
09N02E	GRAPE	2	0.0353	1.3222	0.164	0.357	0.6788	1.0005	1.1935	2
21N03W	GRAPE									
All Records	HAY/FORAGE	1	0	0	0					
All Records	KIWI									
All Records	MELON	3	2.2635	9.009	3.6126	5.6363	9.009	9.009	9.009	1
All Records	MILO/SORGHUM	9	0.0585	12.7273	0.9814	1.2424	1.615	1.615	4.3343	2
All Records	MISC FRUIT TREES	6	0	0	0	0	0	0	0	0
All Records	MISC VEGETABLES	8	0	0	0	0	0	0	0	0
All Records	OATS	12	0	2.2103	0.1061	0.1061	0.2761	0.4666	2.042	3
08N01E	OLIVE	1	0	0						
08N02W	OLIVE	1	46.3231	46.3231						
09N02E	OLIVE	2	0.0382	0.9432	0.1287	0.2644	0.4907	0.717	0.8527	2
15N01W	OLIVE	1	0.6369	0.6369						
15N02E	OLIVE	1	0.637	0.637						
16N02W	OLIVE	1	0.828	0.828						
17N04E	OLIVE	1	3.081	3.081						
20N02W	OLIVE	2	4.4586	4.4586	4.4586	4.4586	4.4586	4.4586	4.4586	0
20N03W	OLIVE	14	1.1561	4.9252	1.4786	1.7172	2.7384	3.7126	4.9252	1
20N04W	OLIVE	14	1.3758	4.154	3.1736	3.3062	3.7038	3.7468	3.7611	2
21N03W	OLIVE	26	0.8248	14.4904	1.4779	1.8252	3.8976	7.9206	9.8633	6
21N04W	OLIVE	1	2.6067	2.6067						
24N03W	OLIVE	7	0.1736	21.8471	0.1736	0.1736	0.1736	6.051	12.7516	1
All Records	PASTURE	2	0	0	0	0	0	0	0	0
13N02W	PEACH	1	265.4867	265.4867						
13N03E	PEACH	8	0.164	10	0.2291	0.3695	2.398	2.398	4.6786	2
13N05E	PEACH	2	2.2808	4.282	2.4809	2.7811	3.2814	3.7817	4.0819	2
14N03E	PEACH	11	0.664	5.531	2.314	2.3735	5.531	5.531	5.531	1
15N03E	PEACH	7	2.677	5.531	2.8414	3.024	3.146	4.509	5.531	1
15N04E	PEACH	3	2.947	2.947	2.947	2.947	2.947	2.947	2.947	0
16N03E	PEACH	12	1.77	3362.832	1.9735	2.5442	2.878	5.0887	3027.2568	4
17N03E	PEACH	15	1.504	5.951	2.5502	2.7525	3.513	5.31	5.6946	4
26N02W	PEACH	1	2.2124	2.2124						
Unknown	PEACH	1	2.513	2.513						
05N05E	PEAR	2	5.1231	11.1538	5.7262	6.6308	8.1384	9.6461	10.5507	2
06N04E	PEAR	22	1.2679	8.3615	1.3279	1.4403	2.0615	2.6754	5.5461	6
13N03E	PEAR	2	6.308	7.385	6.4157	6.5772	6.8465	7.1158	7.2773	2
16N01W	PECAN									
21N03W	PECAN									
07N02E	PEPPERS	7	3.079	4.5909	3.079	3.2715	4.1274	4.4099	4.5703	1
07N03E	PEPPERS	1	5.616	5.616						
08N01E	PEPPERS	2	4.2596	6.3181	4.4654	4.7742	5.2888	5.8035	6.1123	2
08N02E	PEPPERS	5	0.1389	5.1896	1.6636	3.9506	3.9506	4.4897	4.9096	2
10N02E	PEPPERS	1	2.9428	2.9428						
10N03E	PEPPERS	1	3.7952	3.7952						



T-R	CropType	A/R MU Parcels	A/R MIN	A/R MAX	A/R 10%	A/R 25%	A/R 50%	A/R 75%	A/R 90%	A/R Outliers
14N01E	SAFFLOWER	2	2.0775	2.0775	2.0775	2.0775	2.0775	2.0775	2.0775	0
14N03E	SAFFLOWER	1	2.43	2.43						
15N01W	SAFFLOWER	1	2.8169	2.8169						
16N01W	SAFFLOWER	3	2.3474	2.3474	2.3474	2.3474	2.3474	2.3474	2.3474	0
All Records	SQUASH	6	0.0008	5.4348	0.001	0.0013	1.0876	2.6834	4.144	2
All Records	SQUASH SEED	2	48.913	166.0079	60.6225	78.1867	107.4604	136.7342	154.2984	2
20N03W	STRAWBERRIES									
21N03W	STRAWBERRIES									
All Records	SUDAN GRASS									
06N01W	SUNFLOWER	4	3.2656	4.6844	3.4914	3.8301	4.0183	4.1848	4.4846	2
07N01E	SUNFLOWER	14	3.3348	6.6668	4.2532	4.7288	5.085	5.1069	5.9402	4
07N01W	SUNFLOWER	1	2.3105	2.3105						
07N02E	SUNFLOWER	36	0.8871	4.8512	1.3752	1.6069	2.0077	2.5364	4.0083	6
07N03E	SUNFLOWER	4	1.9717	3.1885	2.1912	2.5204	2.9258	3.1583	3.1764	2
08N01E	SUNFLOWER	12	1.7535	6.8573	1.7535	1.9288	4.1017	4.8508	5.7673	2
08N02E	SUNFLOWER	33	1.3959	5.7363	1.5831	1.6676	2.024	2.3493	2.7222	8
08N03E	SUNFLOWER	1	1.9717	1.9717						
09N01E	SUNFLOWER	6	2.2181	4.9291	2.403	2.6802	3.1424	3.3272	4.1282	2
09N02E	SUNFLOWER	29	1.0474	9.3654	1.7227	2.3482	3.6969	3.6969	4.5348	6
09N03E	SUNFLOWER	3	1.9704	1.9704	1.9704	1.9704	1.9704	1.9704	1.9704	0
10N01E	SUNFLOWER	5	2.2181	6.2847	2.3216	2.4769	2.4769	2.4769	4.7616	2
10N02E	SUNFLOWER	18	0.0008	6.6543	1.5262	2.1799	2.403	3.3272	4.5841	4
10N02W	SUNFLOWER	1	6.2847	6.2847						
10N03E	SUNFLOWER	7	1.9704	3.2039	1.9704	2.0942	2.4769	2.7172	3.0561	1
11N01E	SUNFLOWER	1	2.4522	2.4522						
11N02E	SUNFLOWER	4	2.18	3.6969	2.18	2.18	2.9384	3.6969	3.6969	0
11N03E	SUNFLOWER	14	1.386	469.523	1.7133	2.773	2.951	3.018	6.5262	4
12N01W	SUNFLOWER	2	2.3476	6.8752	2.8004	3.4795	4.6114	5.7433	6.4224	2
12N02E	SUNFLOWER	14	1.22	3.29	1.5112	2.1907	2.2181	2.8265	3.068	3
13N02E	SUNFLOWER	2	2.884	3.327	2.9283	2.9947	3.1055	3.2162	3.2827	2
14N01W	SUNFLOWER	6	2.3105	3.3272	2.5416	2.7818	2.8096	2.8096	3.0684	2
15N01W	SUNFLOWER	8	1.9325	6.2356	2.2877	2.4399	3.2238	6.2356	6.2356	1
15N02W	SUNFLOWER	1	4.1072	4.1072						
15N03W	SUNFLOWER	1	4.1072	4.1072						
16N02W	SUNFLOWER	3	5.2989	5.2989	5.2989	5.2989	5.2989	5.2989	5.2989	0
17N01W	SUNFLOWER	5	2.6987	3.2532	2.9205	3.2532	3.2532	3.2532	3.2532	1
17N02W	SUNFLOWER	1	4.8059	4.8059						
17N03W	SUNFLOWER	1	1.6073	1.6073						
18N01W	SUNFLOWER	6	1.4233	2.4658	1.4233	1.4233	1.4233	1.7421	2.1571	1
19N01W	SUNFLOWER	1	3.0807	3.0807						
20N01W	SUNFLOWER	1	1.0351	1.0351						
20N02W	SUNFLOWER	1	1.1091	1.1091						
21N01E	SUNFLOWER	1	2.957	2.957						
21N01W	SUNFLOWER	1	1.0351	1.0351						
Unknown	SUNFLOWER	1	1.93	1.93						
All Records	TOMATO - FRESH	6	1.393	7.6336	1.8035	3.4925	7.3282	7.3282	7.4809	2
06N01W	TOMATO - PROCESSING	2	2.0157	2.2754	2.0417	2.0806	2.1456	2.2105	2.2494	2
06N03E	TOMATO - PROCESSING	1	1.5967	1.5967						





T-R	CropType	A/R MU Parcels	A/R MIN	A/R MAX	A/R 10%	A/R 25%	A/R 50%	A/R 75%	A/R 90%	A/R Outliers
13N02E	VINE SEED									
14N01E	VINE SEED									
15N01W	VINE SEED									
15N02W	VINE SEED									
16N01W	VINE SEED									
16N02W	VINE SEED									
17N01W	VINE SEED									
17N03W	VINE SEED									
19N01W	VINE SEED									
21N01E	VINE SEED									
07N01E	WALNUTS	24	0	5.3659	0.0924	1.4562	2.208	2.9571	4.3619	4
08N01E	WALNUTS	7	0	2.7014	0	0	0.4539	1.3222	2.3949	1
08N02E	WALNUTS	2	0	0	0	0	0	0	0	0
08N02W	WALNUTS	3	2.0553	2.0553	2.0553	2.0553	2.0553	2.0553	2.0553	0
08N03E	WALNUTS	3	1.5423	1.5423	1.5423	1.5423	1.5423	1.5423	1.5423	0
09N01E	WALNUTS	3	6.2696	6.2696	6.2696	6.2696	6.2696	6.2696	6.2696	0
09N02E	WALNUTS	2	1.8119	3.0944	1.9402	2.1325	2.4532	2.7738	2.9662	2
10N01E	WALNUTS	1	5.3918	5.3918						
10N01W	WALNUTS	6	1.6122	5.0157	1.6502	1.8774	3.0812	4.6911	5.0157	1
10N02E	WALNUTS	11	0.9404	3.1975	1.5674	1.6343	2.1768	2.884	3.1975	1
10N03E	WALNUTS	4	1.5987	4.0125	1.5987	1.5987	2.7743	3.9655	3.9937	1
11N02E	WALNUTS	6	0.038	6.2696	0.3325	0.868	2.0495	2.508	4.3888	2
11N03E	WALNUTS	1	6.2696	6.2696						
12N01E	WALNUTS	1	1.044	1.044						
12N01W	WALNUTS	2	1.0876	3.1348	1.2923	1.5994	2.1112	2.623	2.9301	2
12N02E	WALNUTS	7	1.044	4.514	1.044	1.044	1.044	1.525	3.0092	1
12N03E	WALNUTS	7	0.076	1.724	0.076	0.076	0.076	1.7085	1.724	0
12N03W	WALNUTS	1	4.7586	4.7586						
13N01E	WALNUTS	8	1.881	5.7053	1.881	1.881	3.3856	5.094	5.7053	0
13N02E	WALNUTS	1	0.9404	0.9404						
13N03E	WALNUTS	33	0.047	16.458	0.072	0.123	2.285	7.21	16.458	4
13N04E	WALNUTS	64	0.552	156.74	0.909	1.724	2.1005	2.351	2.665	11
13N05E	WALNUTS	21	0.082	2.808	1.129	1.254	1.881	2.0697	2.808	2
14N01E	WALNUTS	6	1.2539	2.069	1.293	1.3672	1.7396	2.0533	2.069	1
14N01W	WALNUTS	5	0.6966	1.1912	0.8944	1.1912	1.1912	1.1912	1.1912	1
14N03E	WALNUTS	37	0.048	15.047	0.282	0.904	1.959	2.351	5.831	7
14N04E	WALNUTS	4	2.177	2.351	2.177	2.177	2.177	2.2205	2.2988	1
14N05E	WALNUTS	12	0.002	5.58	0.053	0.512	0.694	2.877	2.877	3
15N01E	WALNUTS	6	1.473	2.508	1.473	1.7318	2.508	2.508	2.508	0
15N01W	WALNUTS	12	1.5674	3.5737	1.5925	1.818	3.3544	3.5737	3.5737	2
15N02E	WALNUTS	10	0.889	6.27	0.9772	1.4182	1.9615	3.8618	6.27	1
15N03E	WALNUTS	26	0.238	8.15	0.846	1.5827	1.897	2.382	2.7945	6
15N04E	WALNUTS	12	0.502	2.985	1.944	1.944	2.2725	2.351	2.5202	3
16N01W	WALNUTS	31	1.0972	17.0784	1.1285	1.7242	2.508	3.4035	3.8245	4
16N02W	WALNUTS	5	0.7962	2.7429	0.7962	0.7962	1.0784	1.0784	2.0771	1
16N03E	WALNUTS	30	0.082	3.498	0.6694	0.94	1.388	1.818	2.937	6
16N04E	WALNUTS	7	2.351	1943.574	2.351	2.351	2.351	2.351	778.8402	1
17N01W	WALNUTS	7	1.2539	3.7618	1.2539	2.5078	3.7618	3.7618	3.7618	0



T-R	CropType	A/R MU Parcels	A/R MIN	A/R MAX	A/R 10%	A/R 25%	A/R 50%	A/R 75%	A/R 90%	A/R Outliers
13N01E	WHEAT	3	0.8372	1.349	0.8372	0.8372	0.8372	1.0931	1.2466	1
13N02E	WHEAT	4	1.2828	666.558	1.9444	2.9367	39.4185	223.1512	489.1953	2
13N03E	WHEAT	1	1.563	1.563						
14N01E	WHEAT	8	0.9767	26530.233	0.9767	0.9767	0.9767	1.2828	7959.9679	1
14N01W	WHEAT	10	0.0208	5812.5581	0.0208	0.8198	1.721	5812.5581	5812.5581	0
15N01W	WHEAT	5	1.1305	30.2744	1.1874	1.2727	1.3845	1.3845	18.7184	2
15N02W	WHEAT	5	0.5274	0.5274	0.5274	0.5274	0.5274	0.5274	0.5274	0
16N02W	WHEAT	1	1.2047	1.2047						
17N02W	WHEAT	6	1.1628	1.4884	1.1628	1.1628	1.174	1.4126	1.4884	0
18N01W	WHEAT	10	0.8372	1.0558	0.8372	0.8372	0.8372	0.8372	0.8591	1
20N01W	WHEAT	1	0.0831	0.0831						
20N03W	WHEAT	15	0.0775	1.8605	0.0775	1.2698	1.8605	1.8605	1.8605	0
21N01E	WHEAT	1	1.549	1.549						

T-R	CropType	A-R MU Parcels	A-R MIN	A-R MAX	A-R 10%	A-R 25%	A-R 50%	A-R 75%	A-R 90%	A-R Outliers
05N03E	ALFALFA	3	-436.1	-436.1	-436.1	-436.1	-436.1	-436.1	-436.1	0
06N01E	ALFALFA	1	-248.35	-248.35						
06N01W	ALFALFA	3	-341.8	-291.96	-337.97	-332.225	-322.65	-307.305	-298.098	2
06N02E	ALFALFA	12	-313.92	-174.216	-313.92	-309.2475	-255.861	-219.072	-174.216	0
06N03E	ALFALFA	7	-375.3846	0	-375.3846	-187.6923	0	0	0	0
06N04E	ALFALFA	11	-429.193	0	-429.193	-356.4247	0	0	0	0
07N01E	ALFALFA	24	-623	-133.614	-455.5834	-385.2791	-325.943	-270.813	-264.707	6
07N01W	ALFALFA	2	-466.4	-279.5	-447.71	-419.675	-372.95	-326.225	-298.19	2
07N02E	ALFALFA	75	-604.4295	-17.843	-409.6976	-342.65	-332.8067	-311.5	-193.1315	16
07N03E	ALFALFA	10	-436.1	44.25	-436.1	-404.4898	-244.0337	-19.9479	4.425	1
08N01E	ALFALFA	6	-599.39	-284.38	-493.32	-370.475	-320.15	-293.3225	-284.38	1
08N02E	ALFALFA	23	-622.1278	40.7229	-605.6806	-505.876	-344.362	-310.5295	23.3908	6
08N03E	ALFALFA	1	-436.1	-436.1						
09N01E	ALFALFA	1	-415.1	-415.1						
09N02E	ALFALFA	29	-508.55	0	-450.0056	-427.56	-387.25	-217.0693	0	3
10N01E	ALFALFA	2	-398.4	-338.7324	-392.4332	-383.4831	-368.5662	-353.6493	-344.6992	2
10N01W	ALFALFA	1	-362.3566	-362.3566						
10N02E	ALFALFA	6	-396.41	-221.6991	-365.26	-333.5325	-310.491	-238.5698	-221.6991	1
10N03E	ALFALFA	4	-504.63	0	-494.661	-479.7075	-390.827	-232.6905	-93.0762	2
11N01E	ALFALFA	1	-212.0388	-212.0388						
11N02E	ALFALFA	4	-528.2	-362.3566	-511.16	-485.6	-471.4	-444.1391	-395.0696	2
11N03E	ALFALFA	4	-471.4	-229.2	-471.4	-471.4	-350.3	-229.2	-229.2	0
12N02E	ALFALFA	4	-539.41	-398.18	-539.41	-539.41	-468.795	-398.18	-398.18	0
12N03E	ALFALFA	1	-197.1	-197.1						
13N03E	ALFALFA	1	-126.9	-126.9						
14N01W	ALFALFA	3	-361	31.9688	-361	-361	-361	-164.5156	-46.625	1
14N02W	ALFALFA	4	-282	-282	-282	-282	-282	-282	-282	0
14N03E	ALFALFA	3	-618.22	-285.8	-618.22	-618.22	-618.22	-452.01	-352.284	1
15N01W	ALFALFA	5	-361	31.9688	-361	-361	-361	-361	-125.2187	1
16N01W	ALFALFA	1	-511	-511						
16N02W	ALFALFA	1	-437	-437						
16N04E	ALFALFA	1	-286.5	-286.5						
17N01W	ALFALFA	3	-473	-473	-473	-473	-473	-473	-473	0
17N02W	ALFALFA	2	-310	-310	-310	-310	-310	-310	-310	0
18N01W	ALFALFA	5	-488	-373	-488	-488	-468	-456	-406.2	1
19N02W	ALFALFA	1	-333.07	-333.07						
19N03W	ALFALFA	4	-470	-470	-470	-470	-470	-470	-470	0
20N01W	ALFALFA	5	-562	-312	-562	-562	-562	-562	-412	1
20N02W	ALFALFA	1	-326	-326						
20N03W	ALFALFA	5	-40246.6	-235	-24334.36	-466	-466	-466	-327.4	2
Unknown	ALFALFA	2	-478.4	-243.1818	-454.8782	-419.5955	-360.7909	-301.9864	-266.7036	2
07N01E	ALMONDS	22	-489.6	229.6764	-72.4245	-41.344	18.2	70.35	160.6232	6
07N01W	ALMONDS	2	4	23.412	5.9412	8.853	13.706	18.559	21.4708	2
07N02E	ALMONDS	22	-0.628	166.5268	8.1262	15.4132	31.0941	58.3268	83.3076	6
08N01E	ALMONDS	7	-26.8354	119.96	-26.8354	-26.8354	53.796	89.768	118.4504	1
08N03E	ALMONDS	1	-46.98	-46.98						
09N01E	ALMONDS	1	94.7788	94.7788						
09N02E	ALMONDS	5	-113.4	129.4222	-56.08	29.9	94.7788	129.4222	129.4222	1

T-R	CropType	A-R MU Parcels	A-R MIN	A-R MAX	A-R 10%	A-R 25%	A-R 50%	A-R 75%	A-R 90%	A-R Outliers
10N01E	ALMONDS	1	77.5091	77.5091						
10N01W	ALMONDS	9	-88.4554	126.8267	-12.3151	15	51.5455	67.2	88.9365	2
10N02E	ALMONDS	7	-301.4667	32.96	-131.3867	-15.3793	22.484	22.95	26.954	2
11N01E	ALMONDS	1	40.0498	40.0498						
12N01W	ALMONDS	7	9.8901	57.9115	13.9294	16.6222	39.8444	42.5333	48.6846	2
13N01W	ALMONDS	9	22.1	80	24.42	25	30	60	64	2
13N02W	ALMONDS	19	-36	114	-1.6	33.5	52.416	86	87.2	4
14N02W	ALMONDS	3	80	80	80	80	80	80	80	0
14N03E	ALMONDS	4	29.999	176.1	65.9693	119.9248	163	176.1	176.1	1
14N05E	ALMONDS	4	118.35	176.1	118.35	118.35	118.35	132.7875	158.775	1
15N02E	ALMONDS	4	-120.4	-37.8	-99.4	-67.9	-50.4	-47.25	-41.58	2
15N02W	ALMONDS	3	-22	42	-22	-22	-22	10	29.2	1
15N03E	ALMONDS	5	-362.02	179.9575	-200.372	42.1	50.6	129.6	159.8145	2
15N03W	ALMONDS	4	100.02	107.82	100.02	100.02	100.02	101.97	105.48	1
16N02W	ALMONDS	4	-16	-16	-16	-16	-16	-16	-16	0
17N02W	ALMONDS	2	90	90	90	90	90	90	90	0
19N01W	ALMONDS	2	53	161	63.8	80	107	134	150.2	2
20N01E	ALMONDS	39	-45584.67	203.5	-45584.67	-45584.67	20	50.4	65.3	4
20N01W	ALMONDS	14	-135	174	-16.8	15	63	145	161	3
20N02E	ALMONDS	27	-51.7	136.9	-5.492	-1.8	22.5	51.2	120.96	6
20N03W	ALMONDS	18	-22	74	-18	37.5	39.75	66.25	72.6	3
20N04W	ALMONDS	3	-49	-49	-49	-49	-49	-49	-49	0
21N01E	ALMONDS	153	-655	390.3	-93.26	-16.2	25.4	64.5	105	30
21N01W	ALMONDS	16	-175	112	-175	-12.225	55	80	80.9	2
21N02E	ALMONDS	51	-634.6	159.9	-18.35	0.2	51.2	78.8	82.7	7
21N02W	ALMONDS	41	-46	120	11	43	50.4	115	120	4
21N03W	ALMONDS	91	-22.12	134	5	35.5	55	93	110	12
21N04W	ALMONDS	10	114	159.5	114	114	114	114	118.55	1
22N01E	ALMONDS	30	-1035.6	417.1	-37.392	-17.4	26.4	44.8	194.293	6
22N01W	ALMONDS	12	-32.8	104.8	4.22	21.8	50.25	68.875	101.26	4
23N01E	ALMONDS	1	161.9	161.9						
23N01W	ALMONDS	44	-360	317.99	-20.855	3.9	36.25	77.4	163.89	10
23N02W	ALMONDS	11	-73.5	73.1628	-29.5714	-5.8434	29.8421	38.1818	47.7273	2
24N03W	ALMONDS	1	32.375	32.375						
25N02W	ALMONDS	2	-6.9231	-6.9231	-6.9231	-6.9231	-6.9231	-6.9231	-6.9231	0
25N03W	ALMONDS	1	-6.9231	-6.9231						
27N03W	ALMONDS	2	3.4286	3.4286	3.4286	3.4286	3.4286	3.4286	3.4286	0
Unknown	ALMONDS	3	-202.7	56.8	-202.7	-202.7	-202.7	-72.95	4.9	1
All Records	APPLES	5	-12.528	64.1468	3.8432	28.4	57.5	61.8105	63.2123	2
All Records	ASPARAGUS	3	53.1932	193.415	63.8812	79.9131	106.6329	150.0239	176.0586	2
07N01E	BEANS - DRY	5	-8.591	61.0417	18.0931	58.1193	58.1193	58.1193	59.8727	2
07N02E	BEANS - DRY	9	-72.3	47.7	-49.8038	-15.0587	-8.7528	12.3559	20.2666	2
08N01E	BEANS - DRY	7	-50.4122	-22.7214	-50.3899	-48.7307	-44.8079	-40.2902	-33.2627	2
08N02E	BEANS - DRY	2	-3.2399	-3.2399	-3.2399	-3.2399	-3.2399	-3.2399	-3.2399	0
10N01E	BEANS - DRY	3	-29.24	-13.6	-29.24	-29.24	-29.24	-21.42	-16.728	1
10N02E	BEANS - DRY	3	-29.24	-29.24	-29.24	-29.24	-29.24	-29.24	-29.24	0
11N02E	BEANS - DRY	4	38.9181	96.7882	38.9181	38.9181	38.9181	53.3856	79.4272	1
11N03E	BEANS - DRY	8	36.1574	70.93	52.1927	59.0649	60.2972	60.7624	63.8127	2

T-R	CropType	A-R MU Parcels	A-R MIN	A-R MAX	A-R 10%	A-R 25%	A-R 50%	A-R 75%	A-R 90%	A-R Outliers
12N02E	BEANS - DRY	2	69.9698	69.9698	69.9698	69.9698	69.9698	69.9698	69.9698	0
13N01E	BEANS - DRY	2	18.1392	18.1396	18.1392	18.1393	18.1394	18.1395	18.1396	2
13N02E	BEANS - DRY	1	18.1367	18.1367						
14N01E	BEANS - DRY	1	-1	-1						
15N01W	BEANS - DRY	2	116	116	116	116	116	116	116	0
15N02W	BEANS - DRY	2	-1	-1	-1	-1	-1	-1	-1	0
16N01W	BEANS - DRY	1	46	46						
17N01W	BEANS - DRY	3	-65	71	-59.4	-51	-37	17	49.4	2
17N02W	BEANS - DRY	2	44	44	44	44	44	44	44	0
18N01W	BEANS - DRY	5	-97	-35	-84.2	-65	-39	-37	-35.8	2
05N05E	CORN - FODDER/SILAGE	3	-26.2	18	-23.7753	-20.1382	-14.0763	1.9618	11.5847	2
06N03E	CORN - FODDER/SILAGE	2	-55.9	-55.9	-55.9	-55.9	-55.9	-55.9	-55.9	0
07N01E	CORN - FODDER/SILAGE	1	89.728	89.728						
08N02E	CORN - FODDER/SILAGE	2	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	-1.8	0
08N03E	CORN - FODDER/SILAGE	2	115.9459	115.9459	115.9459	115.9459	115.9459	115.9459	115.9459	0
09N01E	CORN - FODDER/SILAGE	3	-1200	186.5363	-1200	-1200	-1200	-506.7318	-90.7709	1
09N02E	CORN - FODDER/SILAGE	7	-1103.4483	186.2824	-377.1287	122.0794	151.3311	169.7569	181.5747	2
10N01E	CORN - FODDER/SILAGE	4	143.888	154.5946	144.0811	144.3709	144.5318	147.0475	151.5758	2
10N02E	CORN - FODDER/SILAGE	2	252.75	252.75	252.75	252.75	252.75	252.75	252.75	0
11N02E	CORN - FODDER/SILAGE	2	233	250.8559	234.7856	237.464	241.928	246.3919	249.0703	2
11N03E	CORN - FODDER/SILAGE	4	229.2	280.1	237.42	249.75	268.15	279.8	279.98	2
13N02E	CORN - FODDER/SILAGE	1	245.6	245.6						
05N03E	CORN - GRAIN	1	71	71						
06N02E	CORN - GRAIN	4	73.432	82.48	76.1464	80.218	82.48	82.48	82.48	1
06N04E	CORN - GRAIN	3	9.0732	75.5022	13.0585	19.0366	29	52.2511	66.2018	2
07N01E	CORN - GRAIN	2	115.8	237.5722	127.9772	146.2431	176.6861	207.1292	225.395	2
07N02E	CORN - GRAIN	9	-122	167.6709	-122	110.88	157.2403	164.5774	165.1964	1
08N01E	CORN - GRAIN	1	121.92	121.92						
08N02E	CORN - GRAIN	4	-572	69	-382.256	-97.64	64.74	69	69	1
08N03E	CORN - GRAIN	2	132.3944	147.7143	133.9264	136.2243	140.0543	143.8843	146.1823	2
08N04E	CORN - GRAIN	7	-29.4	-29.4	-29.4	-29.4	-29.4	-29.4	-29.4	0
10N02E	CORN - GRAIN	3	40	153.3175	51.7183	69.2958	98.5915	125.9545	142.3723	2
10N03E	CORN - GRAIN	4	-2135.3749	98.5915	-2135.3749	-2135.3749	-1018.3917	98.5915	98.5915	0
11N02E	CORN - GRAIN	2	-2.9577	-2.9577	-2.9577	-2.9577	-2.9577	-2.9577	-2.9577	0
11N03E	CORN - GRAIN	4	4.61	211.2	43.718	102.38	143.07	166.1775	193.191	2
12N02E	CORN - GRAIN	4	-145.42	106	-145.42	-145.42	-19.71	106	106	0
12N03E	CORN - GRAIN	1	93.27	93.27						
13N02E	CORN - GRAIN	2	123	128.8	123.58	124.45	125.9	127.35	128.22	2
14N01W	CORN - GRAIN	4	107	107	107	107	107	107	107	0
15N01W	CORN - GRAIN	7	106	165	112.6	117	117	141	165	1
15N03W	CORN - GRAIN	1	83	83						
16N02W	CORN - GRAIN	1	83	83						
18N01W	CORN - GRAIN	7	158	203.5	185.3	203.5	203.5	203.5	203.5	1
19N01W	CORN - GRAIN	2	111	203.5	120.25	134.125	157.25	180.375	194.25	2
20N03W	CORN - GRAIN	27	-39	169	-39	30.5	59	169	169	0
21N03W	CORN - GRAIN	2	121	164	125.3	131.75	142.5	153.25	159.7	2
All Records	CUCUMBER	19	62.3853	116.0015	91.8919	102.72	107.6923	115.8166	115.9884	4
All Records	GARLIC	12	117.487	260.6563	117.487	117.487	147.1039	216.7521	234.4213	2

T-R	CropType	A-R MU Parcels	A-R MIN	A-R MAX	A-R 10%	A-R 25%	A-R 50%	A-R 75%	A-R 90%	A-R Outliers
05N05E	GRAPE	4	23.1467	23.1467	23.1467	23.1467	23.1467	23.1467	23.1467	0
06N03E	GRAPE	27	-52.65	30.7155	-52.65	-22.9698	1.6615	11.8129	21.9376	3
06N04E	GRAPE	59	-46.64	60	-17.0676	3.3	3.3	24.3972	33.3333	8
08N02E	GRAPE	2	-69.5	4.08	-62.142	-51.105	-32.71	-14.315	-3.278	2
09N02E	GRAPE	2	-34.73	6.8235	-30.5746	-24.3416	-13.9532	-3.5649	2.6682	2
21N03W	GRAPE									
All Records	HAY/FORAGE	1	80	80	80					
All Records	KIWI									
All Records	MELON	3	56.1	88.9	62.66	72.5	88.9	88.9	88.9	1
All Records	MILO/SORGHUM	9	-1708.8	110.5714	-324.5893	26.425	45.7	45.7	89.7943	2
All Records	MISC FRUIT TREES	6	15.64	105	60.32	105	105	105	105	1
All Records	MISC VEGETABLES	8	68	175	96	108	108	124.75	175	1
All Records	OATS	12	-674	68.4477	-674	-674	-125.4098	-70.01	56.219	2
08N01E	OLIVE	1	-18.84	-18.84						
08N02W	OLIVE	1	136.546	136.546						
09N02E	OLIVE	2	-251.8056	-5.693	-227.1943	-190.2774	-128.7493	-67.2212	-30.3043	2
15N01W	OLIVE	1	-14	-14						
15N02E	OLIVE	1	-7.91	-7.91						
16N02W	OLIVE	1	-8.31	-8.31						
17N04E	OLIVE	1	40.5	40.5						
20N02W	OLIVE	2	155	155	155	155	155	155	155	0
20N03W	OLIVE	14	7	77	14.57	21.3025	46	48.86	58.758	3
20N04W	OLIVE	14	9.57	46	41	41.75	44	44	44	2
21N03W	OLIVE	26	-8	582	4.17	4.17	57.455	88.25	123	4
21N04W	OLIVE	1	25	25						
24N03W	OLIVE	7	-18.284	589.2354	-18.284	-18.284	-18.284	126.1794	333.5295	1
All Records	PASTURE	2	25	25	25	25	25	25	25	0
13N02W	PEACH	1	897	897						
13N03E	PEACH	8	-587.4	86.4	-409.39	-208.9	75.8	75.8	78.98	2
13N05E	PEACH	2	42.117	91.976	47.1029	54.5818	67.0465	79.5112	86.9901	2
14N03E	PEACH	11	-76	143.4	46.1	69	143.4	143.4	143.4	1
15N03E	PEACH	7	79.3	143.4	83.74	87	92.7	126.25	143.4	1
15N04E	PEACH	3	79.3	79.3	79.3	79.3	79.3	79.3	79.3	0
16N03E	PEACH	12	38.4	95	46.25	59.7275	79.15	86.2275	94.23	4
17N03E	PEACH	15	26.8	249.6	62.14	76.15	98.7	243.5	247.16	4
26N02W	PEACH	1	18.084	18.084						
Unknown	PEACH	1	75.3	75.3						
05N05E	PEAR	2	72.4324	132	78.3892	87.3243	102.2162	117.1081	126.0432	2
06N04E	PEAR	22	9.4118	119.8667	11.0369	15.2855	20.597	50.0978	66.7002	6
13N03E	PEAR	2	68.2	83	69.68	71.9	75.6	79.3	81.52	2
16N01W	PECAN									
21N03W	PECAN									
07N02E	PEPPERS	7	124.24	181.402	124.24	124.892	130.88	149.0777	166.95	1
07N03E	PEPPERS	1	251.7872	251.7872						
08N01E	PEPPERS	2	165.6052	191.2224	168.1669	172.0095	178.4138	184.8181	188.6607	2
08N02E	PEPPERS	5	-1704.524	171.8268	-978.3007	111.0343	111.0343	124.3172	152.823	2
10N02E	PEPPERS	1	132.0368	132.0368						
10N03E	PEPPERS	1	147.3016	147.3016						





T-R	CropType	A-R MU Parcels	A-R MIN	A-R MAX	A-R 10%	A-R 25%	A-R 50%	A-R 75%	A-R 90%	A-R Outliers
14N01E	SAFFLOWER	2	67	67	67	67	67	67	67	0
14N03E	SAFFLOWER	1	89.2	89.2						
15N01W	SAFFLOWER	1	77	77						
16N01W	SAFFLOWER	3	57	57	57	57	57	57	57	0
All Records	SQUASH	6	-169148	97.4286	-136208.32	-103268.64	-51607.32	80.82	93.5943	2
All Records	SQUASH SEED	2	96.976	104.3675	97.7152	98.8239	100.6718	102.5196	103.6284	2
20N03W	STRAWBERRIES									
21N03W	STRAWBERRIES									
All Records	SUDAN GRASS									
06N01W	SUNFLOWER	4	73.54	145.507	85.2793	102.8882	112.671	120.88	135.6562	2
07N01E	SUNFLOWER	14	106.1875	137.671	107.7818	107.7818	108.2818	116.4877	121.4663	3
07N01W	SUNFLOWER	1	56.72	56.72						
07N02E	SUNFLOWER	36	-18.2234	148.474	-2.5026	10.6422	17.1257	47.567	66.9475	8
07N03E	SUNFLOWER	4	39.425	78.247	48.7684	62.7834	73.0497	76.2091	77.4318	2
08N01E	SUNFLOWER	12	5.7818	115.5005	6.2818	10.7818	102.7902	107.7584	111.309	4
08N02E	SUNFLOWER	33	-14.1997	90.8237	2.5056	15.533	19.6244	34.7967	49.2954	8
08N03E	SUNFLOWER	1	39.425	39.425						
09N01E	SUNFLOWER	6	44.153	87.6838	48.3067	53.8238	62.7457	70.4543	79.5485	2
09N02E	SUNFLOWER	29	1.4424	101.8758	35.9636	52.9267	83.8925	83.8925	84.6508	6
09N03E	SUNFLOWER	3	39.3996	39.3996	39.3996	39.3996	39.3996	39.3996	39.3996	0
10N01E	SUNFLOWER	5	43.9333	100.9059	50.2107	59.6269	59.6269	59.6269	84.3943	2
10N02E	SUNFLOWER	18	-88274.3	101.9667	-26451.5367	50.0813	70.4633	83.8925	99.1356	4
10N02W	SUNFLOWER	1	113.5191	113.5191						
10N03E	SUNFLOWER	7	32.95	75.6673	36.8198	39.3996	60.5616	62.6082	67.8318	2
11N01E	SUNFLOWER	1	65.9131	65.9131						
11N02E	SUNFLOWER	4	49.4	83.8925	49.4	49.4	66.6463	83.8925	83.8925	0
11N03E	SUNFLOWER	14	25.1	144.2	35.69	60.4	69.6541	82.0944	86.7294	4
12N01W	SUNFLOWER	2	52.8113	78.6185	55.392	59.2631	65.7149	72.1667	76.0378	2
12N02E	SUNFLOWER	14	14.26	90.5	25.057	50.7322	52.4495	61.48	87.6	3
13N02E	SUNFLOWER	2	81.1	84.9	81.48	82.05	83	83.95	84.52	2
14N01W	SUNFLOWER	6	48	70	52.36	57.79	61	61	65.5	2
15N01W	SUNFLOWER	8	60	124	62.1	63	71	124	124	1
15N02W	SUNFLOWER	1	76	76						
15N03W	SUNFLOWER	1	76	76						
16N02W	SUNFLOWER	3	99	99	99	99	99	99	99	0
17N01W	SUNFLOWER	5	46.4	76	58.24	76	76	76	76	1
17N02W	SUNFLOWER	1	103	103						
17N03W	SUNFLOWER	1	19	19						
18N01W	SUNFLOWER	6	28	59	31.25	34.5	34.5	34.5	46.75	2
19N01W	SUNFLOWER	1	68	68						
20N01W	SUNFLOWER	1	4	4						
20N02W	SUNFLOWER	1	15	15						
21N01E	SUNFLOWER	1	79.4	79.4						
21N01W	SUNFLOWER	1	4	4						
Unknown	SUNFLOWER	1	45.3	45.3						
All Records	TOMATO - FRESH	6	15.64	145.9385	30.47	62.75	130.5193	145.9385	145.9385	1
06N01W	TOMATO - PROCESSING	2	128.4942	142.934	129.9382	132.1042	135.7141	139.324	141.49	2
06N03E	TOMATO - PROCESSING	1	65.4	65.4						



T-R	CropType	A-R MU Parcels	A-R MIN	A-R MAX	A-R 10%	A-R 25%	A-R 50%	A-R 75%	A-R 90%	A-R Outliers
13N02E	VINE SEED									
14N01E	VINE SEED									
15N01W	VINE SEED									
15N02W	VINE SEED									
16N01W	VINE SEED									
16N02W	VINE SEED									
17N01W	VINE SEED									
17N03W	VINE SEED									
19N01W	VINE SEED									
21N01E	VINE SEED									
07N01E	WALNUTS	24	-123.64	154.591	-59.0502	8.644	59.9438	110.5304	146.4406	4
08N01E	WALNUTS	7	-84.9599	104.5563	-84.9595	-77.9923	-58.5524	8.7604	62.9673	2
08N02E	WALNUTS	2	-25.8071	-1.0647	-23.3329	-19.6215	-13.4359	-7.2503	-3.5389	2
08N02W	WALNUTS	3	38.715	38.715	38.715	38.715	38.715	38.715	38.715	0
08N03E	WALNUTS	3	54.1504	54.1504	54.1504	54.1504	54.1504	54.1504	54.1504	0
09N01E	WALNUTS	3	96.6575	96.6575	96.6575	96.6575	96.6575	96.6575	96.6575	0
09N02E	WALNUTS	2	50.1058	82.8979	53.385	58.3038	66.5019	74.6999	79.6187	2
10N01E	WALNUTS	1	126.2529	126.2529						
10N01W	WALNUTS	6	41.0119	156.1219	44.9942	50.9989	63.108	134.3789	156.1219	1
10N02E	WALNUTS	11	-1.9	140.2	43.44	50.4574	54.0611	85.34	140.2	1
10N03E	WALNUTS	4	26.5902	90.0938	26.5902	26.5902	50.6364	78.5353	85.4704	1
11N02E	WALNUTS	6	-3325.8	144.3	-1701.6	-43.9125	76.6037	132.3894	144.3	1
11N03E	WALNUTS	1	96.6575	96.6575						
12N01E	WALNUTS	1	4.2	4.2						
12N01W	WALNUTS	2	7.7311	111.003	18.0583	33.5491	59.3671	85.185	100.6758	2
12N02E	WALNUTS	7	4.2	140.1	4.2	4.2	4.2	57	121.92	1
12N03E	WALNUTS	7	-2324.9	69.3	-2251.52	-2202.6	-2202.6	69.05	69.3	1
12N03W	WALNUTS	1	165.8696	165.8696						
13N01E	WALNUTS	8	74.9	173	74.9	74.9	114.95	159.5	173	0
13N02E	WALNUTS	1	-5	-5						
13N03E	WALNUTS	33	-2055.1	854.7	-1434.515	-819.3	60.12	430.7	854.7	4
13N04E	WALNUTS	64	-142.39	223.56	-8	62.825	86.2	106.63	123.69	13
13N05E	WALNUTS	21	-853.76	259.5	4	4	39.68	96.2	105.4	3
14N01E	WALNUTS	6	21.2	48	22.35	26.875	41	47.25	48	1
14N01W	WALNUTS	5	-30	15.616	-11.888	15.28	15.28	15.28	15.4816	2
14N03E	WALNUTS	37	-2518.3	497.1	-400.58	-7.9	61.2	81.1	261.54	8
14N04E	WALNUTS	4	81.1	86.2	81.1	81.1	81.1	82.375	84.67	1
14N05E	WALNUTS	12	-1347.86	190.4	-1222.597	-95.23	-22.695	101.8	108.82	4
15N01E	WALNUTS	6	48.2	111.05	48.2	63.9125	111.05	111.05	111.05	0
15N01W	WALNUTS	12	53.9	175.44	53.9	80.975	152.42	175.44	175.44	0
15N02E	WALNUTS	10	-6.9	133.5	-2.04	31.4325	46.35	51.45	71.04	2
15N03E	WALNUTS	26	-358.5	181.3	-10.05	39.1875	72.4	95.7	162.19	5
15N04E	WALNUTS	12	-99.4	133	82.06	86.2	88.55	99.4	99.4	3
16N01W	WALNUTS	31	6	256.4	14	73	117	161	201.4	4
16N02W	WALNUTS	5	-8.67	89	-8.67	-8.67	8	8	56.6	1
16N03E	WALNUTS	30	-1690.4	106.26	-54.79	-6.3	67.865	76.5	95.4	5
16N04E	WALNUTS	7	4	86.2	53.32	86.2	86.2	86.2	86.2	1
17N01W	WALNUTS	7	20.04	37	20.04	28.52	37	37	37	0



T-R	CropType	A-R MU Parcels	A-R MIN	A-R MAX	A-R 10%	A-R 25%	A-R 50%	A-R 75%	A-R 90%	A-R Outliers
13N01E	WHEAT	3	-25	45.259	-25	-25	-25	10.1295	31.2072	1
13N02E	WHEAT	4	32	239.64	54.5	88.25	107.77	141.315	200.31	2
13N03E	WHEAT	1	57.547	57.547						
14N01E	WHEAT	8	-3	618.977	-3	-3	-3	32	208.0931	1
14N01W	WHEAT	10	-4713	124.978	-4713	-26.25	45.5	124.978	124.978	0
15N01W	WHEAT	5	16	116	19.2	24	49	49	89.2	2
15N02W	WHEAT	5	-51.3	-51.3	-51.3	-51.3	-51.3	-51.3	-51.3	0
16N02W	WHEAT	1	27	27						
17N02W	WHEAT	6	21	40	21	21	23	36.25	40	0
18N01W	WHEAT	10	-18	7	-18	-18	-18	-18	-15.5	1
20N01W	WHEAT	1	-552	-552						
20N03W	WHEAT	15	-595	55	-595	37	55	55	55	0
21N01E	WHEAT	1	56.697	56.697						