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# MORPHOLOGICAL, TEMPORAL, AND NODAL ACCUMULATION OF NUTRIENTS BY DETERMINATE SOYBEAN

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***ABSTRACT***: Crop growth models that account for nutrient accumulation offer insight into soil fertility and plant nutrition interactions. This understanding provides opportunities to develop improved management practices. During the 1980s, several process-level growth models were developed for soybean [*Glycine max* (L.) Merr.]. Model validation and application to different locations and weather require detailed, independent data sets. An extensive data set describing the nutrient status of a determinate soybean ('Bragg') was collected in 1979 on a Goldsboro (Aquic Paleudult) loamy sand near Florence, SC, USA. Because of its importance to subsequent model development, we concluded that providing this entire data set in a readily accessible form was a logical step in the course of this experiment. We report here, in tabular form, mean and standard deviation data for aerial accumulation of dry matter and eight nutrients (N, P, K, Ca, Mg, Mn, Fe, and Zn) for 10 dates, for four plant components (stems, leaves, petioles, pods, and total), and for each node (and whole plant). We will provide, upon arrangement, these same data on diskette for use in simulation models or other applications.

## INTRODUCTION

Model development is an iterative procedure by which mathematical equations of a model are gradually improved as a result of evaluations with increasing numbers of data sets. For soybean growth and development, this has resulted in the process-level models such as SOYGRO[2], for example. However, there remains a critical need for independent data to validate the models for environments and cultivars other than those used for model development.

Historically, most nutrient data has been published as concentrations because they can be used to diagnose nutrient deficiencies using either critical values[3] or Diagnosis Recommendation Integrated System [DRIS][4]. However, validating plant growth models requires nutrient and dry matter accumulation data. Fertilizer recommendations are more easily recognized from nutrient accumulation expressed in mass per unit area rather than from concentration. Furthermore, nutrient accumulation curves can be differentiated over time to produce nutrient accumulation rates. Illustrations of this type of analysis exist for corn[5,6] and for wheat[7].

Aerial dry matter and nutrient concentrations for an intensive experiment with determinate soybean have been documented graphically in this journal[8,9,10,11] as functions of time, plant part, and nodal position. Recognizing both the unique combination of temporal and nodal information represented therein and the modelers' need for independent data, we concluded that providing the entire data set in a readily accessible form was a logical step in the course of communicating the results of the experiment. While preparing this information on determinate soybean, we became aware of a data set[12] describing row spacing and soil water effects on indeterminate soybean grown in Iowa, and coincidentally, in the same year. For two sampling dates in their study, values for leaf area, pod number, and component masses were published as a function of height, but this was not done for nutrient information. To our knowledge, the information presented here on determinate soybean is the only

data set with nutrient accumulation as a function of plant part, time, and nodal position.

## MATERIALS AND METHODS

Crop culture, weather, sampling methods, soil analyses, and nutrient analysis procedures have been reported previously[8,9,10,11]. Nutrient concentrations and aerial dry matter data that were used for graphs in those publications were used to produce the nutrient accumulation tables reported here. Nutrient concentrations were multiplied by aerial dry matter values for each day, node, and plant part, and then converted to kg/ha. Tables for each nutrient were created using PROC TABULATE of SAS[13,14], including mean and standard deviation of the individual cells, and summary values across plant part and node. These statistics represent the mean and standard deviation of the nutrient accumulation; that is, individual measurements of dry mass and concentration multiplied, rather than means of each multiplied. This procedure accounted for the cross correlation between mass and concentration. The original sampling had 4 replicates at each of 4 locations per treatment. For this analysis, locations were considered a second hierarchy of replicate, resulting in 16 points per mean value. There were 8226 dry matter samples. For about 2500 samples, there was not enough plant material to perform the concentration analysis, so replicates were physically combined. Samples were also combined over replicates for the last 4 dates in order to reduce the total number from about 4000 to about 1000. For all pooled cases, the separate masses were recorded, then the physical samples combined across replications as needed to provide a suitable sample. In about 600 cases, replicates 1 and 2 or 3 and 4 were pooled; where samples were smaller still (about 1000 cases), all 4 replicates were pooled; where samples were smallest, the pooling extended to locations as well (45 determinations were made on the combined material from all 16 dry matter samples). In order to produce the best estimate of data variance, individual masses were multiplied by the concentration that was common to the combined sample. The standard deviation

was then indicative of variation in the mass alone. This was done by necessity only. It is expected that concentration was by far more conservative than mass, thus the variation in mass for pooled samples represents most of the variation in the accumulation of a nutrient.

## RESULTS AND DISCUSSION

Temporal and nodal changes in soybean growth, development, and nutrient concentration from this experiment were discussed previously[8,9,10,11], but are summarized to provide insight to analyses of these data available in the literature. Scott et al.[8] presented growth analysis and statistical representations of partitioning coefficients and of sample variability. Sojka et al.[9] showed that nodal and temporal mean K and Ca concentrations varied over time and node, but mean Mg concentrations did not. They also concluded that mean concentrations of these elements in all plant parts can vary two fold or more depending on plant age and node. Sojka et al.[10,11] described variation in N, P, Fe, Mn, and Zn that was similar to variation in K and Ca. These presentations were normally 2-dimensional response surfaces describing concentration, sample variability, or other characteristics over time and node. These graphs are easily interpreted for trends and main effects, but are not easily used for model validation.

The tabular presentation of accumulation data from this experiment in Tables 1 through 9, presented as an appendix, allows potential users to scrutinize accumulation and partitioning of aerial dry matter and eight essential plant nutrients. We will provide this information and daily weather data on diskette upon request. Each nutrient is given in a separate table, with the four plant parts and total comprising the headings of the columns. Time is the major vertical dimension, and nodal position the minor, resulting in 171 observations over date and node. After each date, the sum of accumulated nutrient over the nodes is given. Each cell in the table holds the mean and standard deviation of the value.

TABLE 1. Aerial dry matter accumulation means and standard deviations for each day after planting (DAP), node, and plant part. Values are in kg/ha, and planting date was 143 (23 May).

| | | ----Stems-- | | ---Leaves-- | | --Petioles- | | ----Pods--- | | ---Totals-- | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DAP | Node | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev |
| 44 | 1 | 58.8 | 21.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 58.8 | 21.0 |
| | 2 | 29.6 | 8.5 | 0.5 | 1.8 | 0.2 | 0.9 | 0.0 | 0.0 | 30.3 | 8.8 |
| | 3 | 22.4 | 5.8 | 12.2 | 8.3 | 7.7 | 10.0 | 0.0 | 0.0 | 42.4 | 19.2 |
| | 4 | 28.1 | 9.2 | 73.7 | 19.2 | 19.0 | 6.4 | 0.0 | 0.0 | 120.8 | 31.5 |
| | 5 | 29.0 | 9.1 | 99.2 | 37.9 | 25.7 | 8.0 | 0.0 | 0.0 | 153.8 | 49.9 |
| | 6 | 25.7 | 8.1 | 107.7 | 37.3 | 23.8 | 8.9 | 0.0 | 0.0 | 157.2 | 52.5 |
| | 7 | 15.1 | 7.7 | 61.5 | 29.9 | 15.3 | 8.8 | 0.0 | 0.0 | 91.9 | 40.3 |
| | 8 | 6.6 | 9.7 | 20.7 | 28.5 | 4.2 | 6.0 | 0.0 | 0.0 | 31.4 | 41.1 |
| | 9 | 0.4 | 1.6 | 1.8 | 5.0 | 0.4 | 1.0 | 0.0 | 0.0 | 2.6 | 7.1 |
| | All | 215.8 | 66.6 | 377.2 | 110.8 | 96.2 | 32.0 | 0.0 | 0.0 | 689.2 | 203.8 |
| 57 | 1 | 71.0 | 19.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 71.0 | 19.5 |
| | 2 | 51.3 | 10.8 | 4.9 | 12.4 | 3.2 | 7.9 | 0.0 | 0.0 | 59.3 | 23.8 |
| | 3 | 37.8 | 8.0 | 23.5 | 17.0 | 13.4 | 10.8 | 0.0 | 0.0 | 74.7 | 29.9 |
| | 4 | 49.1 | 10.4 | 34.5 | 21.2 | 17.6 | 11.1 | 0.0 | 0.0 | 101.2 | 35.0 |
| | 5 | 52.6 | 10.9 | 93.4 | 23.2 | 35.6 | 6.8 | 0.0 | 0.0 | 181.6 | 29.9 |
| | 6 | 55.1 | 12.9 | 135.5 | 19.4 | 43.8 | 7.3 | 0.0 | 0.0 | 234.3 | 37.3 |
| | 7 | 49.4 | 10.9 | 156.3 | 23.1 | 52.1 | 14.4 | 0.0 | 0.0 | 257.9 | 45.6 |
| | 8 | 44.9 | 10.1 | 158.6 | 30.2 | 51.9 | 13.3 | 0.0 | 0.0 | 255.4 | 52.4 |
| | 9 | 35.0 | 12.4 | 121.4 | 41.0 | 38.1 | 16.6 | 0.0 | 0.0 | 194.6 | 69.5 |
| | 10 | 18.7 | 11.6 | 63.2 | 41.4 | 18.5 | 15.6 | 0.0 | 0.0 | 100.5 | 67.1 |
| | 11 | 5.8 | 7.1 | 15.7 | 21.8 | 4.4 | 6.2 | 0.0 | 0.0 | 26.0 | 34.5 |
| | 12 | 1.1 | 2.7 | 1.8 | 4.6 | 0.7 | 1.8 | 0.0 | 0.0 | 3.5 | 9.0 |
| | All | 471.7 | 112.1 | 808.8 | 165.1 | 279.3 | 79.4 | 0.0 | 0.0 | 1559.9 | 349.9 |
| 70 | 1 | 110.9 | 44.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 110.9 | 44.2 |
| | 2 | 94.4 | 28.2 | 36.5 | 71.3 | 43.4 | 86.3 | 0.0 | 0.0 | 174.3 | 177.0 |
| | 3 | 71.0 | 20.8 | 63.2 | 64.4 | 67.3 | 75.5 | 0.0 | 0.0 | 201.5 | 149.0 |
| | 4 | 87.3 | 22.2 | 48.1 | 40.4 | 53.5 | 51.3 | 0.0 | 0.0 | 188.9 | 102.4 |
| | 5 | 101.8 | 22.4 | 49.4 | 42.1 | 56.1 | 47.1 | 0.0 | 0.0 | 207.3 | 89.7 |
| | 6 | 106.1 | 29.0 | 37.3 | 34.3 | 38.3 | 29.6 | 0.0 | 0.0 | 181.6 | 72.2 |
| | 7 | 99.9 | 25.3 | 66.8 | 42.0 | 74.4 | 37.4 | 0.0 | 0.0 | 241.2 | 83.9 |
| | 8 | 104.7 | 26.8 | 169.5 | 65.4 | 121.2 | 42.5 | 0.0 | 0.0 | 395.5 | 119.8 |
| | 9 | 94.3 | 30.7 | 166.0 | 40.3 | 88.6 | 25.3 | 0.0 | 0.0 | 349.0 | 86.6 |
| | 10 | 85.9 | 19.8 | 167.4 | 38.0 | 76.5 | 17.5 | 0.0 | 0.0 | 329.8 | 68.0 |
| | 11 | 82.3 | 26.0 | 192.2 | 45.9 | 85.3 | 17.8 | 0.0 | 0.0 | 359.8 | 78.5 |
| | 12 | 66.7 | 20.5 | 186.5 | 48.0 | 79.0 | 22.0 | 0.0 | 0.0 | 332.3 | 89.8 |
| | 13 | 50.1 | 17.3 | 141.3 | 55.8 | 59.2 | 21.7 | 0.0 | 0.0 | 250.6 | 93.5 |
| | 14 | 29.9 | 16.2 | 81.1 | 46.4 | 35.3 | 19.0 | 0.0 | 0.0 | 146.3 | 81.2 |
| | 15 | 5.5 | 8.4 | 14.8 | 23.2 | 6.8 | 10.7 | 0.0 | 0.0 | 27.1 | 42.3 |
| | 16 | 0.0 | 0.0 | 1.2 | 4.9 | 0.7 | 2.7 | 0.0 | 0.0 | 1.9 | 7.6 |
| | All | 1190.8 | 296.2 | 1421.4 | 292.5 | 885.7 | 221.3 | 0.0 | 0.0 | 3497.9 | 774.0 |
| 79 | 1 | 181.7 | 37.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 181.7 | 37.0 |
| | 2 | 119.2 | 19.7 | 17.9 | 46.7 | 16.6 | 43.1 | 0.0 | 0.0 | 153.8 | 91.9 |
| | 3 | 89.7 | 13.7 | 58.3 | 84.4 | 90.6 | 131.9 | 0.0 | 0.0 | 238.5 | 219.5 |
| | 4 | 124.5 | 23.5 | 71.6 | 90.1 | 104.2 | 126.7 | 0.0 | 0.0 | 300.4 | 226.0 |
| | 5 | 139.3 | 31.2 | 49.2 | 45.1 | 70.5 | 69.4 | 0.0 | 0.0 | 259.0 | 130.3 |
| | 6 | 151.1 | 30.6 | 45.0 | 33.3 | 60.0 | 43.1 | 0.0 | 0.0 | 256.1 | 90.2 |
| | 7 | 152.1 | 24.5 | 131.3 | 49.3 | 170.7 | 61.7 | 0.0 | 0.0 | 454.1 | 118.5 |
| | 8 | 158.2 | 23.1 | 129.7 | 68.6 | 157.0 | 82.3 | 0.0 | 0.0 | 444.9 | 165.9 |
| | 9 | 140.9 | 27.5 | 149.1 | 53.7 | 115.6 | 37.7 | 0.0 | 0.0 | 405.6 | 99.5 |
| | 10 | 137.0 | 19.1 | 198.2 | 33.5 | 113.5 | 24.5 | 0.0 | 0.0 | 448.6 | 65.8 |
| | 11 | 122.5 | 18.4 | 212.7 | 33.0 | 109.0 | 16.9 | 0.0 | 0.0 | 444.2 | 62.2 |
| | 12 | 104.5 | 21.9 | 202.9 | 30.2 | 101.2 | 17.3 | 0.0 | 0.0 | 408.6 | 60.9 |
| | 13 | 81.5 | 22.7 | 181.3 | 34.6 | 87.3 | 22.0 | 0.0 | 0.0 | 350.1 | 74.0 |
| | 14 | 55.4 | 23.6 | 142.8 | 48.7 | 66.8 | 23.9 | 0.0 | 0.0 | 265.1 | 94.5 |
| | 15 | 36.3 | 21.8 | 95.9 | 54.9 | 43.2 | 25.8 | 0.0 | 0.0 | 175.3 | 101.5 |
| | 16 | 18.5 | 17.3 | 50.2 | 47.1 | 20.2 | 17.2 | 0.0 | 0.0 | 88.9 | 80.8 |
| | 17 | 6.7 | 10.8 | 16.2 | 24.2 | 7.2 | 10.6 | 0.0 | 0.0 | 30.0 | 45.4 |
| | 18 | 0.7 | 2.6 | 1.6 | 6.4 | 0.9 | 3.4 | 0.0 | 0.0 | 3.1 | 12.5 |
| | All | 1819.7 | 317.2 | 1753.7 | 438.5 | 1334.5 | 435.8 | 0.0 | 0.0 | 4908.0 | 1107.0 |

(cont'd)

TABLE 1. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 90 | 1 | 157.0 | 39.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 147.2 | 54.5 |
| | 2 | 139.7 | 25.8 | 49.2 | 62.3 | 84.6 | 88.1 | 1.6 | 2.4 | 257.9 | 166.3 |
| | 3 | 106.7 | 18.6 | 158.2 | 130.6 | 274.4 | 227.1 | 5.8 | 6.5 | 511.0 | 382.1 |
| | 4 | 139.1 | 24.8 | 152.9 | 136.0 | 210.6 | 197.9 | 4.2 | 3.8 | 475.1 | 353.9 |
| | 5 | 149.4 | 27.6 | 84.5 | 73.8 | 131.6 | 131.3 | 3.0 | 2.8 | 345.5 | 235.7 |
| | 6 | 161.4 | 28.6 | 68.5 | 46.6 | 100.0 | 53.7 | 3.2 | 1.6 | 312.3 | 130.0 |
| | 7 | 160.2 | 24.9 | 137.4 | 53.9 | 201.6 | 63.0 | 6.6 | 2.5 | 474.2 | 170.4 |
| | 8 | 169.2 | 27.6 | 143.2 | 73.4 | 192.9 | 99.9 | 7.7 | 2.4 | 480.9 | 217.3 |
| | 9 | 155.1 | 25.3 | 111.3 | 46.9 | 135.8 | 58.8 | 6.6 | 2.8 | 383.3 | 153.7 |
| | 10 | 152.4 | 22.4 | 121.8 | 57.1 | 102.8 | 46.5 | 5.2 | 1.4 | 358.2 | 136.6 |
| | 11 | 148.5 | 20.6 | 192.7 | 37.0 | 116.6 | 24.4 | 5.2 | 1.5 | 434.1 | 129.8 |
| | 12 | 132.6 | 26.7 | 216.4 | 29.8 | 117.5 | 20.5 | 6.0 | 2.1 | 443.0 | 135.1 |
| | 13 | 107.2 | 22.8 | 197.0 | 37.7 | 103.6 | 19.4 | 5.3 | 1.8 | 387.3 | 123.4 |
| | 14 | 81.7 | 20.4 | 174.0 | 49.8 | 87.1 | 20.5 | 5.6 | 2.2 | 326.7 | 121.5 |
| | 15 | 59.2 | 19.3 | 138.2 | 45.2 | 68.6 | 24.7 | 5.4 | 2.0 | 254.4 | 109.4 |
| | 16 | 38.2 | 17.7 | 98.8 | 48.5 | 47.4 | 22.7 | 3.6 | 1.5 | 176.3 | 97.9 |
| | 17 | 30.0 | 36.8 | 67.1 | 38.7 | 27.6 | 17.6 | 2.0 | 1.6 | 118.8 | 85.3 |
| | 18 | 8.3 | 7.0 | 29.7 | 21.8 | 11.9 | 8.4 | 1.3 | 1.3 | 48.1 | 37.6 |
| | 19 | 1.6 | 2.3 | 6.9 | 10.2 | 2.3 | 3.7 | 0.3 | 0.6 | 10.4 | 16.0 |
| | 20 | 0.2 | 0.6 | 1.4 | 3.8 | 0.3 | 1.0 | 0.1 | 0.3 | 1.9 | 5.4 |
| | All | 2097.8 | 338.5 | 2149.1 | 522.7 | 2017.2 | 673.8 | 78.7 | 20.7 | 5946.5 | 2106.3 |
| 100 | 1 | 178.8 | 52.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 178.8 | 52.8 |
| | 2 | 161.7 | 37.0 | 18.8 | 34.0 | 34.5 | 70.3 | 2.6 | 5.3 | 217.6 | 118.8 |
| | 3 | 125.2 | 27.6 | 79.3 | 85.2 | 136.3 | 135.1 | 8.2 | 10.8 | 349.0 | 229.9 |
| | 4 | 173.4 | 40.0 | 163.7 | 118.9 | 250.3 | 163.2 | 15.5 | 11.7 | 602.9 | 299.0 |
| | 5 | 191.6 | 44.0 | 59.8 | 76.8 | 94.2 | 117.1 | 8.2 | 10.4 | 353.8 | 206.5 |
| | 6 | 211.8 | 59.9 | 119.3 | 85.5 | 160.8 | 114.0 | 13.1 | 8.7 | 504.9 | 224.6 |
| | 7 | 199.9 | 48.1 | 177.7 | 81.3 | 255.2 | 114.3 | 19.0 | 10.8 | 651.9 | 221.9 |
| | 8 | 209.1 | 50.9 | 194.3 | 93.3 | 271.0 | 149.4 | 30.4 | 13.5 | 704.8 | 276.9 |
| | 9 | 200.4 | 49.4 | 175.4 | 68.0 | 218.4 | 116.4 | 27.3 | 10.3 | 621.5 | 223.7 |
| | 10 | 205.2 | 46.1 | 170.2 | 47.5 | 173.5 | 65.5 | 23.9 | 9.9 | 572.8 | 127.9 |
| | 11 | 201.5 | 42.0 | 252.7 | 76.5 | 157.0 | 36.4 | 21.7 | 6.4 | 633.0 | 131.6 |
| | 12 | 181.2 | 42.0 | 265.7 | 52.8 | 154.3 | 35.5 | 28.7 | 13.1 | 629.9 | 128.9 |
| | 13 | 151.2 | 39.0 | 251.1 | 53.7 | 138.4 | 33.0 | 29.4 | 11.6 | 570.1 | 117.6 |
| | 14 | 113.2 | 32.0 | 220.7 | 54.9 | 118.4 | 28.9 | 36.2 | 12.1 | 488.4 | 115.6 |
| | 15 | 84.1 | 26.1 | 162.2 | 48.6 | 85.1 | 28.3 | 31.0 | 12.0 | 362.4 | 103.9 |
| | 16 | 57.8 | 22.0 | 125.7 | 50.8 | 60.5 | 27.8 | 25.7 | 11.2 | 269.8 | 100.2 |
| | 17 | 35.4 | 18.3 | 103.2 | 39.4 | 41.7 | 20.6 | 17.7 | 10.4 | 197.9 | 80.8 |
| | 18 | 16.1 | 11.8 | 61.4 | 41.0 | 25.0 | 19.8 | 12.5 | 10.7 | 115.1 | 75.3 |
| | 19 | 4.7 | 7.1 | 22.7 | 28.5 | 7.8 | 9.8 | 4.7 | 7.3 | 39.9 | 48.3 |
| | 20 | 0.7 | 1.2 | 5.7 | 10.8 | 1.7 | 3.8 | 1.3 | 2.8 | 9.4 | 17.3 |
| | All | 2703.1 | 612.2 | 2629.8 | 537.9 | 2383.9 | 761.6 | 357.1 | 91.2 | 8073.9 | 1788.5 |
| 113 | 1 | 216.8 | 90.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 216.8 | 90.6 |
| | 2 | 160.3 | 31.4 | 31.4 | 52.1 | 57.2 | 96.6 | 14.7 | 26.4 | 263.5 | 189.3 |
| | 3 | 126.8 | 29.8 | 46.8 | 68.4 | 93.4 | 130.1 | 19.5 | 31.9 | 286.5 | 238.7 |
| | 4 | 166.6 | 38.2 | 113.6 | 153.0 | 215.1 | 304.8 | 57.4 | 86.0 | 552.7 | 543.8 |
| | 5 | 200.8 | 48.5 | 100.6 | 105.3 | 186.8 | 211.1 | 58.2 | 55.3 | 546.4 | 397.0 |
| | 6 | 210.2 | 59.3 | 130.7 | 107.1 | 248.9 | 224.5 | 75.2 | 66.5 | 665.0 | 434.6 |
| | 7 | 206.8 | 48.2 | 196.8 | 90.6 | 328.9 | 145.7 | 97.6 | 48.1 | 830.0 | 291.6 |
| | 8 | 214.2 | 41.8 | 158.5 | 44.6 | 248.8 | 104.1 | 105.1 | 42.3 | 726.6 | 192.4 |
| | 9 | 195.6 | 40.4 | 111.1 | 77.8 | 154.6 | 121.6 | 85.9 | 44.7 | 547.1 | 262.4 |
| | 10 | 205.0 | 38.0 | 127.3 | 64.4 | 125.0 | 50.4 | 73.4 | 26.8 | 530.7 | 134.8 |
| | 11 | 214.3 | 42.4 | 229.1 | 76.6 | 171.5 | 42.8 | 83.6 | 26.5 | 698.5 | 146.6 |
| | 12 | 189.1 | 34.1 | 278.4 | 37.2 | 172.7 | 30.7 | 98.3 | 25.5 | 738.5 | 97.3 |
| | 13 | 151.4 | 32.0 | 240.4 | 45.3 | 149.6 | 28.8 | 102.5 | 40.3 | 643.8 | 120.1 |
| | 14 | 116.8 | 26.5 | 209.9 | 44.3 | 130.5 | 32.9 | 125.3 | 37.9 | 582.5 | 106.0 |
| | 15 | 85.6 | 22.0 | 159.8 | 48.7 | 95.3 | 33.5 | 118.3 | 41.1 | 459.0 | 115.8 |
| | 16 | 56.9 | 22.8 | 123.9 | 32.3 | 66.4 | 25.8 | 77.7 | 44.9 | 324.9 | 96.4 |
| | 17 | 31.1 | 17.7 | 87.4 | 37.1 | 42.7 | 24.5 | 55.0 | 24.6 | 216.2 | 94.5 |
| | 18 | 9.8 | 13.4 | 36.8 | 40.4 | 15.7 | 20.1 | 30.5 | 37.0 | 92.8 | 102.1 |
| | 19 | 2.9 | 7.2 | 4.7 | 9.3 | 2.0 | 3.9 | 5.3 | 16.4 | 14.8 | 29.9 |
| | 20 | 0.2 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.7 |
| | All | 2761.1 | 549.9 | 2387.0 | 432.9 | 2505.0 | 895.7 | 1283.5 | 394.5 | 8936.7 | 2038.1 |

TABLE 1. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 127 | 1 | 161.5 | 61.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 161.5 | 61.8 |
| | 2 | 149.1 | 40.1 | 33.0 | 74.2 | 72.7 | 138.2 | 44.3 | 114.6 | 299.0 | 316.3 |
| | 3 | 113.9 | 30.6 | 76.6 | 81.9 | 151.2 | 160.2 | 98.5 | 106.6 | 440.1 | 359.0 |
| | 4 | 153.1 | 51.0 | 140.6 | 105.7 | 293.4 | 236.4 | 149.5 | 102.7 | 736.6 | 475.8 |
| | 5 | 173.5 | 48.1 | 52.7 | 93.7 | 93.9 | 172.0 | 71.4 | 88.5 | 391.6 | 373.9 |
| | 6 | 191.0 | 61.4 | 101.9 | 75.7 | 188.7 | 155.7 | 152.7 | 94.8 | 634.3 | 335.5 |
| | 7 | 186.0 | 47.9 | 178.4 | 73.7 | 303.0 | 126.2 | 237.2 | 96.6 | 904.6 | 307.0 |
| | 8 | 195.8 | 59.3 | 177.9 | 73.8 | 318.3 | 165.7 | 271.6 | 106.7 | 963.5 | 380.0 |
| | 9 | 181.4 | 58.0 | 141.6 | 67.5 | 228.3 | 142.4 | 255.1 | 128.8 | 806.4 | 371.9 |
| | 10 | 177.3 | 50.0 | 106.6 | 41.9 | 137.7 | 72.6 | 206.2 | 80.9 | 627.9 | 212.9 |
| | 11 | 183.5 | 58.9 | 136.3 | 63.3 | 118.0 | 56.0 | 168.8 | 73.2 | 606.6 | 217.9 |
| | 12 | 173.5 | 66.0 | 192.1 | 74.7 | 141.1 | 55.0 | 188.8 | 87.1 | 695.5 | 251.9 |
| | 13 | 146.6 | 59.6 | 201.2 | 70.5 | 135.5 | 51.5 | 197.1 | 104.0 | 680.3 | 256.8 |
| | 14 | 116.1 | 49.7 | 174.9 | 66.2 | 114.4 | 47.1 | 195.7 | 80.1 | 601.1 | 221.2 |
| | 15 | 86.6 | 39.5 | 138.9 | 61.4 | 92.2 | 42.1 | 183.3 | 97.9 | 501.0 | 222.2 |
| | 16 | 61.4 | 30.2 | 123.5 | 52.9 | 71.9 | 34.1 | 166.0 | 91.9 | 422.8 | 179.8 |
| | 17 | 36.5 | 22.8 | 84.5 | 48.5 | 43.8 | 28.0 | 117.1 | 75.2 | 281.8 | 162.0 |
| | 18 | 18.8 | 16.1 | 48.8 | 35.4 | 23.5 | 19.2 | 75.3 | 59.9 | 166.3 | 123.4 |
| | 19 | 5.7 | 7.9 | 14.3 | 21.6 | 7.0 | 10.6 | 33.2 | 45.9 | 60.3 | 81.3 |
| | 20 | 0.4 | 1.1 | 2.6 | 5.8 | 0.8 | 2.0 | 2.5 | 7.2 | 6.3 | 15.7 |
| | All | 2511.7 | 792.8 | 2126.2 | 592.8 | 2535.3 | 1035.8 | 2814.3 | 832.2 | 9987.5 | 3108.0 |
| 139 | 1 | 178.8 | 44.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 178.8 | 44.1 |
| | 2 | 118.9 | 26.4 | 13.7 | 25.5 | 34.1 | 55.2 | 32.5 | 51.8 | 199.1 | 139.8 |
| | 3 | 93.9 | 25.5 | 64.7 | 85.6 | 154.6 | 194.3 | 168.3 | 269.8 | 481.6 | 550.2 |
| | 4 | 123.9 | 32.5 | 57.6 | 54.8 | 153.4 | 126.7 | 142.6 | 113.7 | 477.5 | 297.1 |
| | 5 | 141.2 | 44.7 | 29.3 | 33.8 | 71.5 | 70.3 | 92.7 | 92.4 | 334.7 | 189.6 |
| | 6 | 156.8 | 38.0 | 59.1 | 58.2 | 124.0 | 111.8 | 177.1 | 142.0 | 517.0 | 309.8 |
| | 7 | 152.9 | 38.2 | 104.7 | 50.2 | 213.9 | 110.9 | 305.7 | 145.7 | 777.3 | 308.9 |
| | 8 | 166.6 | 36.9 | 94.5 | 41.8 | 204.5 | 109.0 | 339.6 | 119.0 | 805.0 | 262.1 |
| | 9 | 153.7 | 34.6 | 77.3 | 47.7 | 156.7 | 104.6 | 369.3 | 165.9 | 756.9 | 316.1 |
| | 10 | 153.6 | 32.5 | 44.9 | 32.6 | 83.7 | 57.6 | 248.9 | 125.7 | 531.2 | 201.6 |
| | 11 | 156.8 | 29.0 | 67.2 | 45.0 | 68.8 | 34.0 | 217.9 | 83.0 | 510.7 | 134.0 |
| | 12 | 147.3 | 31.0 | 120.2 | 60.4 | 95.9 | 25.3 | 241.6 | 80.3 | 604.9 | 122.0 |
| | 13 | 125.3 | 32.3 | 151.0 | 39.3 | 99.3 | 23.8 | 266.5 | 90.0 | 642.1 | 146.4 |
| | 14 | 97.6 | 35.6 | 137.6 | 30.2 | 86.7 | 14.6 | 266.9 | 109.5 | 588.8 | 137.9 |
| | 15 | 76.0 | 32.5 | 99.0 | 27.6 | 66.5 | 21.2 | 260.4 | 85.9 | 501.8 | 121.7 |
| | 16 | 48.2 | 24.6 | 72.8 | 29.7 | 49.9 | 26.7 | 224.6 | 114.0 | 395.6 | 168.7 |
| | 17 | 29.4 | 21.1 | 54.2 | 24.4 | 32.1 | 18.3 | 145.9 | 93.4 | 261.6 | 129.6 |
| | 18 | 14.8 | 20.1 | 27.8 | 22.3 | 14.5 | 13.6 | 69.5 | 71.8 | 126.6 | 116.9 |
| | 19 | 2.5 | 6.4 | 13.9 | 19.0 | 6.9 | 10.5 | 46.3 | 74.2 | 69.6 | 102.2 |
| | 20 | 0.0 | 0.0 | 0.3 | 1.3 | 0.4 | 1.7 | 0.0 | 0.0 | 0.8 | 3.0 |
| | All | 2138.2 | 529.3 | 1289.8 | 279.1 | 1717.4 | 561.1 | 3616.2 | 974.0 | 8761.5 | 1927.5 |
| 149 | 1 | 194.9 | 61.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 194.9 | 61.0 |
| | 2 | 140.2 | 26.5 | 0.0 | 0.0 | 39.1 | 73.7 | 65.0 | 121.2 | 244.3 | 196.7 |
| | 3 | 97.3 | 15.5 | 0.8 | 1.9 | 62.9 | 91.0 | 80.5 | 122.0 | 241.5 | 212.8 |
| | 4 | 138.3 | 29.4 | 3.3 | 6.4 | 110.8 | 102.1 | 167.0 | 173.8 | 419.3 | 280.5 |
| | 5 | 156.2 | 32.6 | 2.6 | 4.6 | 51.5 | 42.3 | 109.2 | 106.6 | 319.6 | 145.5 |
| | 6 | 171.9 | 38.8 | 3.2 | 7.2 | 80.7 | 45.3 | 190.1 | 106.9 | 445.9 | 137.6 |
| | 7 | 171.5 | 36.7 | 6.0 | 7.9 | 179.9 | 44.3 | 427.6 | 190.6 | 785.0 | 235.0 |
| | 8 | 187.9 | 41.6 | 5.7 | 6.4 | 160.2 | 74.8 | 466.2 | 152.0 | 820.2 | 228.4 |
| | 9 | 168.9 | 43.8 | 2.5 | 4.6 | 112.9 | 83.2 | 472.5 | 164.0 | 756.8 | 272.1 |
| | 10 | 167.0 | 35.8 | 4.0 | 6.6 | 53.6 | 43.9 | 332.2 | 118.9 | 556.7 | 175.7 |
| | 11 | 175.0 | 39.1 | 2.9 | 4.1 | 28.1 | 13.7 | 340.5 | 77.9 | 546.6 | 115.4 |
| | 12 | 161.3 | 38.9 | 2.5 | 4.2 | 22.2 | 17.6 | 330.2 | 79.1 | 516.2 | 113.0 |
| | 13 | 138.3 | 37.0 | 1.3 | 3.0 | 21.5 | 14.9 | 372.9 | 96.4 | 534.0 | 117.3 |
| | 14 | 109.5 | 32.8 | 0.8 | 2.6 | 28.5 | 17.3 | 324.1 | 87.3 | 462.8 | 113.4 |
| | 15 | 78.5 | 27.8 | 0.5 | 1.2 | 25.8 | 15.6 | 299.5 | 117.0 | 404.3 | 151.9 |
| | 16 | 55.1 | 26.2 | 1.7 | 4.3 | 16.3 | 19.9 | 239.2 | 132.5 | 312.3 | 159.1 |
| | 17 | 33.6 | 20.5 | 0.0 | 0.0 | 6.2 | 8.4 | 147.4 | 77.2 | 187.1 | 94.6 |
| | 18 | 15.5 | 12.7 | 0.0 | 0.0 | 4.0 | 10.8 | 93.0 | 80.3 | 112.5 | 92.1 |
| | 19 | 2.9 | 4.2 | 0.0 | 0.0 | 0.0 | 0.0 | 19.3 | 32.4 | 22.2 | 35.5 |
| | 20 | 0.3 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.1 | 32.5 | 8.4 | 33.4 |
| | All | 2364.0 | 533.0 | 37.6 | 25.6 | 1004.4 | 296.9 | 4484.6 | 655.3 | 7890.6 | 1300.9 |

TABLE 2. Aerial nitrogen accumulation means and standard deviations for each day after planting (DAP), node, and plant part. Values are in kg/ha, and planting date was 143 (23 May).

| | | ---Stems--- | | ---Leaves--- | | --Petioles-- | | ----Pods---- | | ---Totals--- | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DAP | Node | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev |
| 44 | 1 | 0.80 | 0.26 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.80 | 0.26 |
| | 2 | 0.42 | 0.12 | 0.01 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.43 | 0.14 |
| | 3 | 0.37 | 0.10 | 0.57 | 0.40 | 0.16 | 0.21 | 0.00 | 0.00 | 1.10 | 0.59 |
| | 4 | 0.60 | 0.21 | 3.41 | 0.96 | 0.40 | 0.13 | 0.00 | 0.00 | 4.45 | 1.18 |
| | 5 | 0.73 | 0.25 | 3.87 | 2.93 | 0.48 | 0.18 | 0.00 | 0.00 | 1.81 | 1.79 |
| | 6 | 0.72 | 0.25 | 0.00 | 0.00 | 0.52 | 0.18 | 0.00 | 0.00 | 1.23 | 0.40 |
| | 7 | 0.46 | 0.23 | 0.00 | 0.00 | 0.37 | 0.21 | 0.00 | 0.00 | 0.83 | 0.42 |
| | 8 | 0.21 | 0.31 | 0.00 | 0.00 | 0.11 | 0.15 | 0.00 | 0.00 | 0.31 | 0.42 |
| | All | 4.30 | 1.40 | 4.71 | 2.06 | 2.02 | 0.68 | 0.00 | 0.00 | 12.09 | 4.93 |
| 57 | 1 | 0.86 | 0.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.86 | 0.23 |
| | 2 | 0.63 | 0.13 | 0.22 | 0.57 | 0.07 | 0.17 | 0.00 | 0.00 | 0.93 | 0.77 |
| | 3 | 0.50 | 0.12 | 1.11 | 0.83 | 0.33 | 0.26 | 0.00 | 0.00 | 1.93 | 1.10 |
| | 4 | 0.72 | 0.18 | 1.56 | 0.99 | 0.42 | 0.25 | 0.00 | 0.00 | 2.70 | 1.27 |
| | 5 | 0.87 | 0.24 | 3.78 | 0.88 | 0.62 | 0.18 | 0.00 | 0.00 | 5.27 | 0.89 |
| | 6 | 0.98 | 0.29 | 6.36 | 0.76 | 0.73 | 0.14 | 0.00 | 0.00 | 8.07 | 1.07 |
| | 7 | 0.96 | 0.23 | 8.26 | 1.25 | 0.91 | 0.28 | 0.00 | 0.00 | 10.08 | 1.62 |
| | 8 | 1.02 | 0.26 | 8.91 | 1.74 | 0.96 | 0.24 | 0.00 | 0.00 | 10.89 | 2.19 |
| | 9 | 0.84 | 0.26 | 7.01 | 2.40 | 0.80 | 0.30 | 0.00 | 0.00 | 8.72 | 2.71 |
| | 10 | 0.49 | 0.30 | 4.01 | 2.01 | 0.45 | 0.37 | 0.00 | 0.00 | 4.45 | 2.95 |
| | 11 | 0.15 | 0.19 | 0.86 | 1.19 | 0.12 | 0.17 | 0.00 | 0.00 | 1.13 | 1.52 |
| | 12 | 0.03 | 0.08 | 0.09 | 0.24 | 0.02 | 0.05 | 0.00 | 0.00 | 0.14 | 0.36 |
| | All | 8.16 | 2.12 | 41.68 | 8.72 | 5.43 | 1.68 | 0.00 | 0.00 | 56.82 | 12.65 |
| 70 | 1 | 1.22 | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.22 | 0.51 |
| | 2 | 0.99 | 0.29 | 2.36 | 3.98 | 1.06 | 1.83 | 0.00 | 0.00 | 3.56 | 5.39 |
| | 3 | 0.89 | 0.46 | 2.64 | 3.12 | 1.25 | 1.39 | 0.00 | 0.00 | 4.78 | 4.53 |
| | 4 | 1.02 | 0.26 | 2.17 | 1.80 | 1.35 | 1.06 | 0.00 | 0.00 | 4.20 | 2.93 |
| | 5 | 1.20 | 0.27 | 2.69 | 2.03 | 1.51 | 0.98 | 0.00 | 0.00 | 4.69 | 3.11 |
| | 6 | 1.12 | 0.30 | 2.00 | 1.61 | 0.93 | 0.71 | 0.00 | 0.00 | 3.80 | 2.42 |
| | 7 | 1.13 | 0.32 | 3.10 | 1.81 | 1.57 | 0.80 | 0.00 | 0.00 | 5.79 | 2.53 |
| | 8 | 1.33 | 0.33 | 6.82 | 2.67 | 2.18 | 0.95 | 0.00 | 0.00 | 9.91 | 3.43 |
| | 9 | 1.27 | 0.42 | 7.28 | 2.04 | 1.30 | 0.47 | 0.00 | 0.00 | 9.40 | 2.94 |
| | 10 | 1.37 | 0.32 | 7.71 | 1.99 | 1.06 | 0.32 | 0.00 | 0.00 | 10.08 | 2.41 |
| | 11 | 1.59 | 0.44 | 9.38 | 2.72 | 1.27 | 0.27 | 0.00 | 0.00 | 9.72 | 5.11 |
| | 12 | 1.30 | 0.42 | 9.59 | 2.89 | 1.37 | 0.35 | 0.00 | 0.00 | 10.74 | 4.95 |
| | 13 | 1.15 | 0.41 | 7.25 | 2.62 | 1.14 | 0.34 | 0.00 | 0.00 | 8.04 | 4.19 |
| | 14 | 0.71 | 0.38 | 4.84 | 2.13 | 0.85 | 0.36 | 0.00 | 0.00 | 5.69 | 3.38 |
| | 15 | 0.14 | 0.22 | 0.79 | 1.24 | 0.16 | 0.24 | 0.00 | 0.00 | 1.09 | 1.69 |
| | All | 16.19 | 4.05 | 61.05 | 14.73 | 15.46 | 4.45 | 0.00 | 0.00 | 92.70 | 22.01 |
| 79 | 1 | 1.24 | 0.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.24 | 0.28 |
| | 2 | 0.86 | 0.16 | 0.82 | 2.15 | 0.22 | 0.56 | 0.00 | 0.00 | 1.90 | 2.71 |
| | 3 | 0.67 | 0.11 | 3.19 | 4.36 | 1.64 | 2.12 | 0.00 | 0.00 | 4.90 | 6.26 |
| | 4 | 0.94 | 0.16 | 3.48 | 4.47 | 1.78 | 2.06 | 0.00 | 0.00 | 6.20 | 6.58 |
| | 5 | 1.11 | 0.20 | 2.31 | 2.13 | 1.57 | 1.38 | 0.00 | 0.00 | 4.79 | 3.57 |
| | 6 | 1.27 | 0.23 | 1.98 | 1.64 | 1.23 | 0.82 | 0.00 | 0.00 | 4.48 | 2.39 |
| | 7 | 1.34 | 0.28 | 6.00 | 2.42 | 3.22 | 1.00 | 0.00 | 0.00 | 10.19 | 3.36 |
| | 8 | 1.55 | 0.24 | 6.53 | 3.15 | 2.97 | 1.27 | 0.00 | 0.00 | 8.27 | 4.88 |
| | 9 | 1.69 | 0.35 | 5.64 | 2.37 | 1.81 | 0.64 | 0.00 | 0.00 | 7.61 | 3.29 |
| | 10 | 1.87 | 0.37 | 7.79 | 1.80 | 1.37 | 0.28 | 0.00 | 0.00 | 8.57 | 3.68 |
| | 11 | 1.91 | 0.39 | 10.01 | 1.58 | 1.28 | 0.24 | 0.00 | 0.00 | 10.97 | 4.57 |
| | 12 | 1.94 | 0.25 | 10.52 | 1.74 | 1.25 | 0.26 | 0.00 | 0.00 | 13.26 | 2.39 |
| | 13 | 1.58 | 0.33 | 9.62 | 1.88 | 1.18 | 0.28 | 0.00 | 0.00 | 11.77 | 3.09 |
| | 14 | 1.25 | 0.28 | 8.00 | 2.24 | 1.05 | 0.26 | 0.00 | 0.00 | 9.44 | 3.74 |
| | 15 | 0.94 | 0.36 | 6.43 | 2.64 | 0.64 | 0.42 | 0.00 | 0.00 | 6.49 | 4.25 |
| | 16 | 0.54 | 0.36 | 3.22 | 2.86 | 0.39 | 0.25 | 0.00 | 0.00 | 3.04 | 3.32 |
| | 17 | 0.13 | 0.21 | 1.08 | 1.46 | 0.15 | 0.19 | 0.00 | 0.00 | 1.05 | 1.72 |
| | 18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.06 | 0.00 | 0.00 | 0.02 | 0.06 |
| | All | 19.38 | 2.97 | 75.44 | 23.41 | 20.13 | 5.81 | 0.00 | 0.00 | 115.53 | 31.45 |

TABLE 2. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 90 | 1 | 1.00 | 0.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.75 | 0.50 |
| | 2 | 0.92 | 0.16 | 2.89 | 2.96 | 1.08 | 1.29 | 0.00 | 0.00 | 3.73 | 3.90 |
| | 3 | 0.78 | 0.16 | 8.21 | 5.74 | 3.72 | 2.55 | 0.00 | 0.00 | 10.66 | 8.85 |
| | 4 | 0.91 | 0.19 | 8.57 | 5.87 | 3.15 | 2.52 | 0.11 | 0.11 | 9.88 | 8.96 |
| | 5 | 1.10 | 0.28 | 4.43 | 3.36 | 2.31 | 1.85 | 0.08 | 0.07 | 6.44 | 5.60 |
| | 6 | 1.29 | 0.33 | 3.27 | 1.96 | 1.51 | 0.70 | 0.08 | 0.04 | 5.00 | 3.21 |
| | 7 | 1.38 | 0.32 | 6.00 | 2.41 | 3.30 | 0.62 | 0.18 | 0.07 | 10.02 | 3.82 |
| | 8 | 1.61 | 0.33 | 6.71 | 3.07 | 3.17 | 1.27 | 0.23 | 0.07 | 10.31 | 5.28 |
| | 9 | 1.78 | 0.55 | 4.79 | 2.08 | 2.19 | 0.98 | 0.19 | 0.08 | 7.98 | 3.35 |
| | 10 | 2.11 | 0.70 | 4.98 | 2.20 | 1.56 | 0.74 | 0.16 | 0.04 | 8.26 | 3.53 |
| | 11 | 2.36 | 0.60 | 7.81 | 1.76 | 1.46 | 0.38 | 0.16 | 0.05 | 10.78 | 3.36 |
| | 12 | 2.17 | 0.63 | 9.14 | 1.12 | 1.42 | 0.34 | 0.19 | 0.07 | 11.89 | 3.65 |
| | 13 | 1.85 | 0.60 | 8.96 | 1.65 | 1.31 | 0.30 | 0.16 | 0.05 | 11.49 | 3.75 |
| | 14 | 1.38 | 0.47 | 8.03 | 2.20 | 1.12 | 0.31 | 0.18 | 0.07 | 9.62 | 3.66 |
| | 15 | 1.07 | 0.32 | 6.68 | 2.27 | 0.93 | 0.28 | 0.18 | 0.06 | 8.17 | 3.62 |
| | 16 | 0.79 | 0.26 | 4.78 | 2.45 | 0.77 | 0.18 | 0.13 | 0.04 | 5.71 | 3.45 |
| | 17 | 0.51 | 0.63 | 3.24 | 1.98 | 0.37 | 0.26 | 0.04 | 0.03 | 3.77 | 2.68 |
| | 18 | 0.20 | 0.16 | 1.40 | 1.09 | 0.18 | 0.12 | 0.00 | 0.00 | 1.57 | 1.34 |
| | 19 | 0.00 | 0.00 | 0.32 | 0.48 | 0.03 | 0.05 | 0.00 | 0.00 | 0.33 | 0.52 |
| | 20 | 0.00 | 0.00 | 0.06 | 0.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.16 |
| | All | 21.62 | 3.86 | 95.23 | 24.40 | 26.95 | 7.49 | 1.85 | 0.56 | 136.89 | 47.85 |
| 100 | 1 | 1.06 | 0.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.06 | 0.32 |
| | 2 | 0.99 | 0.22 | 0.78 | 1.41 | 0.38 | 0.78 | 0.09 | 0.17 | 2.24 | 2.34 |
| | 3 | 0.77 | 0.15 | 3.29 | 3.59 | 1.62 | 1.61 | 0.24 | 0.21 | 5.81 | 5.20 |
| | 4 | 1.08 | 0.23 | 7.18 | 5.29 | 3.33 | 2.17 | 0.51 | 0.39 | 12.11 | 7.73 |
| | 5 | 1.23 | 0.26 | 2.46 | 3.16 | 1.24 | 1.57 | 0.27 | 0.35 | 5.21 | 4.99 |
| | 6 | 1.40 | 0.38 | 4.95 | 3.25 | 2.38 | 1.64 | 0.51 | 0.29 | 7.87 | 4.88 |
| | 7 | 1.42 | 0.33 | 7.74 | 3.72 | 3.48 | 1.47 | 0.64 | 0.37 | 13.28 | 5.49 |
| | 8 | 1.62 | 0.42 | 8.43 | 4.08 | 3.81 | 1.91 | 1.03 | 0.46 | 14.90 | 6.31 |
| | 9 | 1.81 | 0.43 | 7.59 | 3.11 | 3.29 | 1.73 | 0.94 | 0.37 | 13.66 | 5.04 |
| | 10 | 2.25 | 0.62 | 6.59 | 1.87 | 2.33 | 1.01 | 0.82 | 0.35 | 12.00 | 2.79 |
| | 11 | 2.56 | 0.67 | 9.88 | 2.94 | 1.88 | 0.51 | 0.74 | 0.22 | 14.49 | 3.86 |
| | 12 | 2.54 | 0.66 | 10.26 | 2.16 | 1.67 | 0.38 | 0.96 | 0.44 | 15.11 | 3.44 |
| | 13 | 2.26 | 0.57 | 10.43 | 2.12 | 1.55 | 0.40 | 1.01 | 0.39 | 15.25 | 2.97 |
| | 14 | 1.78 | 0.53 | 9.60 | 2.31 | 1.34 | 0.33 | 1.24 | 0.43 | 13.97 | 3.25 |
| | 15 | 1.38 | 0.44 | 7.46 | 2.24 | 1.01 | 0.31 | 1.08 | 0.43 | 10.92 | 3.11 |
| | 16 | 1.03 | 0.42 | 5.74 | 2.38 | 0.81 | 0.36 | 0.90 | 0.40 | 8.48 | 3.19 |
| | 17 | 0.69 | 0.38 | 4.88 | 1.82 | 0.61 | 0.27 | 0.60 | 0.35 | 6.78 | 2.59 |
| | 18 | 0.36 | 0.27 | 2.87 | 1.89 | 0.39 | 0.30 | 0.42 | 0.36 | 4.05 | 2.57 |
| | 19 | 0.12 | 0.19 | 1.09 | 1.35 | 0.13 | 0.16 | 0.16 | 0.25 | 1.50 | 1.81 |
| | 20 | 0.01 | 0.01 | 0.27 | 0.52 | 0.03 | 0.06 | 0.00 | 0.00 | 0.31 | 0.59 |
| | All | 26.36 | 5.72 | 110.27 | 25.58 | 31.30 | 9.68 | 11.91 | 3.21 | 180.78 | 40.56 |
| 113 | 1 | 1.22 | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.22 | 0.51 |
| | 2 | 0.93 | 0.16 | 1.49 | 2.01 | 1.02 | 1.32 | 0.71 | 1.00 | 3.35 | 4.00 |
| | 3 | 0.73 | 0.16 | 1.66 | 2.41 | 1.27 | 1.83 | 0.92 | 1.33 | 4.35 | 5.41 |
| | 4 | 0.95 | 0.22 | 4.19 | 5.78 | 2.94 | 4.22 | 2.90 | 3.69 | 10.26 | 13.33 |
| | 5 | 1.21 | 0.27 | 3.91 | 4.38 | 2.85 | 3.42 | 2.26 | 2.24 | 10.22 | 9.91 |
| | 6 | 1.28 | 0.35 | 5.03 | 4.35 | 3.58 | 2.92 | 2.77 | 2.48 | 12.66 | 9.81 |
| | 7 | 1.37 | 0.28 | 7.38 | 3.24 | 4.57 | 1.93 | 3.67 | 1.78 | 16.99 | 6.71 |
| | 8 | 1.53 | 0.25 | 6.04 | 1.85 | 3.45 | 1.10 | 3.84 | 1.58 | 14.87 | 3.95 |
| | 9 | 1.64 | 0.29 | 4.40 | 3.33 | 2.48 | 1.82 | 3.18 | 1.76 | 11.70 | 6.78 |
| | 10 | 2.18 | 0.48 | 4.65 | 2.30 | 1.81 | 0.82 | 2.64 | 1.05 | 11.28 | 3.31 |
| | 11 | 2.72 | 0.50 | 7.87 | 2.58 | 1.88 | 0.51 | 2.99 | 0.96 | 15.47 | 3.65 |
| | 12 | 2.75 | 0.46 | 9.82 | 1.38 | 1.74 | 0.33 | 3.40 | 0.91 | 17.71 | 2.38 |
| | 13 | 2.40 | 0.51 | 8.80 | 1.83 | 1.47 | 0.29 | 3.63 | 1.45 | 16.31 | 3.35 |
| | 14 | 1.92 | 0.43 | 8.00 | 1.78 | 1.33 | 0.34 | 4.58 | 1.37 | 15.83 | 3.04 |
| | 15 | 1.56 | 0.44 | 6.35 | 2.08 | 1.05 | 0.40 | 4.22 | 1.50 | 13.19 | 3.49 |
| | 16 | 1.16 | 0.43 | 5.05 | 1.52 | 0.84 | 0.32 | 2.85 | 1.66 | 9.90 | 3.01 |
| | 17 | 0.74 | 0.37 | 3.57 | 1.63 | 0.62 | 0.32 | 2.00 | 0.92 | 6.92 | 2.96 |
| | 18 | 0.24 | 0.32 | 2.01 | 1.73 | 0.23 | 0.28 | 1.47 | 1.47 | 3.08 | 3.44 |
| | 19 | 0.05 | 0.14 | 0.20 | 0.40 | 0.03 | 0.06 | 0.19 | 0.60 | 0.48 | 1.05 |
| | All | 26.59 | 4.68 | 89.57 | 19.03 | 32.92 | 12.20 | 46.73 | 15.20 | 195.80 | 47.58 |

(cont'd)

TABLE 2. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 127 | 1 | 1.12 | 0.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.12 | 0.44 |
| | 2 | 0.97 | 0.27 | 1.23 | 2.67 | 1.99 | 3.25 | 2.65 | 5.90 | 5.68 | 10.60 |
| | 3 | 0.78 | 0.21 | 3.00 | 3.24 | 2.14 | 2.26 | 4.37 | 4.71 | 10.30 | 10.12 |
| | 4 | 1.07 | 0.35 | 5.29 | 4.00 | 3.96 | 3.18 | 0.00 | 0.00 | 10.32 | 7.43 |
| | 5 | 1.27 | 0.35 | 2.02 | 3.55 | 1.55 | 2.89 | 3.17 | 3.98 | 8.01 | 10.37 |
| | 6 | 1.41 | 0.46 | 3.99 | 3.01 | 3.06 | 2.46 | 6.89 | 4.23 | 15.36 | 9.47 |
| | 7 | 1.50 | 0.38 | 6.98 | 2.85 | 4.51 | 1.83 | 10.34 | 4.23 | 23.33 | 8.73 |
| | 8 | 1.66 | 0.50 | 6.98 | 3.01 | 4.60 | 2.27 | 0.00 | 0.00 | 13.25 | 5.44 |
| | 9 | 1.73 | 0.54 | 5.47 | 2.59 | 3.43 | 2.19 | 11.41 | 5.97 | 22.04 | 10.52 |
| | 10 | 1.98 | 0.57 | 4.07 | 1.64 | 2.19 | 1.28 | 9.13 | 3.72 | 17.37 | 6.45 |
| | 11 | 2.36 | 0.75 | 5.16 | 2.40 | 1.84 | 0.94 | 7.50 | 3.27 | 16.85 | 6.52 |
| | 12 | 2.51 | 0.94 | 7.03 | 2.83 | 1.91 | 0.82 | 8.29 | 3.83 | 19.74 | 7.53 |
| | 13 | 2.23 | 0.90 | 7.49 | 2.65 | 1.75 | 0.66 | 0.00 | 0.00 | 11.47 | 4.10 |
| | 14 | 1.85 | 0.81 | 6.57 | 2.45 | 1.31 | 0.52 | 8.50 | 3.49 | 18.24 | 6.58 |
| | 15 | 1.45 | 0.66 | 5.52 | 2.42 | 1.14 | 0.51 | 8.04 | 4.31 | 16.15 | 7.26 |
| | 16 | 1.13 | 0.55 | 5.03 | 2.18 | 0.88 | 0.42 | 7.21 | 4.01 | 14.26 | 6.12 |
| | 17 | 0.76 | 0.47 | 3.40 | 2.00 | 0.58 | 0.35 | 5.21 | 3.34 | 9.96 | 5.72 |
| | 18 | 0.42 | 0.36 | 1.94 | 1.44 | 0.31 | 0.25 | 3.33 | 2.65 | 6.00 | 4.43 |
| | 19 | 0.12 | 0.17 | 0.57 | 0.84 | 0.10 | 0.14 | 1.97 | 2.15 | 2.26 | 3.03 |
| | 20 | 0.01 | 0.03 | 0.10 | 0.23 | 0.01 | 0.03 | 0.11 | 0.31 | 0.23 | 0.58 |
| | All | 26.33 | 8.84 | 81.85 | 23.06 | 36.80 | 14.27 | 96.98 | 28.61 | 241.96 | 71.62 |
| 139 | 1 | 0.79 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.59 | 0.37 |
| | 2 | 0.57 | 0.16 | 0.46 | 0.81 | 0.31 | 0.54 | 1.62 | 2.60 | 2.84 | 3.78 |
| | 3 | 0.44 | 0.13 | 1.81 | 2.33 | 1.44 | 1.74 | 8.10 | 13.02 | 11.79 | 17.02 |
| | 4 | 0.58 | 0.17 | 1.74 | 1.68 | 1.62 | 1.45 | 6.69 | 5.28 | 10.63 | 8.12 |
| | 5 | 0.66 | 0.23 | 0.85 | 1.00 | 0.96 | 0.85 | 4.36 | 4.42 | 6.82 | 6.00 |
| | 6 | 0.75 | 0.17 | 1.72 | 1.73 | 1.57 | 1.41 | 8.32 | 6.58 | 12.36 | 9.49 |
| | 7 | 0.72 | 0.15 | 2.95 | 1.46 | 2.34 | 1.15 | 14.19 | 6.98 | 20.20 | 8.90 |
| | 8 | 0.81 | 0.15 | 2.65 | 1.17 | 2.21 | 0.97 | 15.75 | 5.52 | 21.42 | 6.85 |
| | 9 | 0.79 | 0.16 | 2.16 | 1.33 | 1.50 | 0.83 | 17.23 | 7.89 | 21.68 | 9.45 |
| | 10 | 0.89 | 0.18 | 1.27 | 0.91 | 0.83 | 0.51 | 11.72 | 6.00 | 14.71 | 6.41 |
| | 11 | 0.99 | 0.22 | 1.87 | 1.28 | 0.73 | 0.36 | 10.38 | 4.00 | 13.97 | 4.41 |
| | 12 | 1.01 | 0.23 | 3.26 | 1.67 | 0.92 | 0.23 | 11.51 | 3.73 | 16.69 | 4.27 |
| | 13 | 0.93 | 0.20 | 4.03 | 1.11 | 0.89 | 0.23 | 12.86 | 4.16 | 18.70 | 4.96 |
| | 14 | 0.79 | 0.25 | 3.82 | 0.88 | 0.76 | 0.12 | 12.63 | 5.15 | 18.00 | 5.13 |
| | 15 | 0.64 | 0.23 | 2.66 | 0.75 | 0.58 | 0.18 | 12.20 | 3.99 | 16.07 | 4.28 |
| | 16 | 0.45 | 0.20 | 1.90 | 0.78 | 0.45 | 0.23 | 10.72 | 5.48 | 13.51 | 6.02 |
| | 17 | 0.35 | 0.20 | 1.43 | 0.64 | 0.30 | 0.15 | 7.07 | 4.37 | 9.15 | 4.69 |
| | 18 | 0.22 | 0.26 | 0.70 | 0.55 | 0.21 | 0.15 | 3.51 | 3.63 | 4.59 | 4.34 |
| | 19 | 0.04 | 0.08 | 0.33 | 0.44 | 0.07 | 0.11 | 2.36 | 3.74 | 2.81 | 4.24 |
| | All | 12.23 | 2.70 | 35.49 | 8.04 | 17.62 | 4.91 | 171.21 | 46.93 | 236.54 | 52.36 |
| 149 | 1 | 1.02 | 0.37 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.02 | 0.37 |
| | 2 | 0.61 | 0.12 | 0.00 | 0.00 | 0.29 | 0.67 | 3.29 | 6.28 | 4.19 | 6.95 |
| | 3 | 0.39 | 0.06 | 0.00 | 0.00 | 0.51 | 0.78 | 5.58 | 6.74 | 5.09 | 7.03 |
| | 4 | 0.56 | 0.12 | 0.08 | 0.15 | 0.80 | 0.72 | 0.00 | 0.00 | 1.44 | 0.86 |
| | 5 | 0.57 | 0.14 | 0.06 | 0.10 | 0.45 | 0.36 | 5.33 | 5.18 | 6.40 | 5.40 |
| | 6 | 0.66 | 0.16 | 0.07 | 0.17 | 0.73 | 0.40 | 9.59 | 5.47 | 11.05 | 5.76 |
| | 7 | 0.65 | 0.14 | 0.12 | 0.17 | 1.52 | 0.38 | 22.15 | 9.80 | 24.45 | 9.98 |
| | 8 | 0.70 | 0.15 | 0.12 | 0.14 | 1.12 | 0.53 | 0.00 | 0.00 | 1.94 | 0.64 |
| | 9 | 0.63 | 0.16 | 0.05 | 0.09 | 0.88 | 0.56 | 23.96 | 8.71 | 25.52 | 9.28 |
| | 10 | 0.65 | 0.16 | 0.10 | 0.17 | 0.50 | 0.41 | 16.76 | 6.04 | 18.01 | 6.45 |
| | 11 | 0.70 | 0.17 | 0.00 | 0.00 | 0.28 | 0.12 | 17.28 | 3.86 | 18.26 | 3.99 |
| | 12 | 0.65 | 0.14 | 0.00 | 0.00 | 0.26 | 0.16 | 16.45 | 4.02 | 17.30 | 4.13 |
| | 13 | 0.63 | 0.18 | 0.00 | 0.00 | 0.21 | 0.15 | 0.00 | 0.00 | 0.85 | 0.24 |
| | 14 | 0.52 | 0.12 | 0.00 | 0.00 | 0.23 | 0.13 | 16.34 | 4.42 | 17.09 | 4.45 |
| | 15 | 0.45 | 0.09 | 0.00 | 0.00 | 0.20 | 0.12 | 15.13 | 5.70 | 15.79 | 5.80 |
| | 16 | 0.43 | 0.14 | 0.03 | 0.08 | 0.16 | 0.17 | 12.91 | 7.35 | 10.25 | 8.71 |
| | 17 | 0.34 | 0.18 | 0.00 | 0.00 | 0.06 | 0.08 | 6.64 | 4.01 | 5.38 | 4.44 |
| | 18 | 0.21 | 0.17 | 0.00 | 0.00 | 0.04 | 0.09 | 5.78 | 4.51 | 4.58 | 4.79 |
| | 19 | 0.05 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.07 |
| | 20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.40 | 1.60 | 0.40 | 1.60 |
| | All | 10.42 | 2.46 | 0.64 | 0.49 | 8.14 | 2.58 | 169.86 | 21.08 | 189.05 | 24.30 |

TABLE 3. Aerial phosphorus accumulation means and standard deviations for each day after planting (DAP), node, and plant part. Values are in kg/ha, and planting date was 143 (23 May).

| | | ---Stems--- | | ---Leaves--- | | --Petioles-- | | ----Pods---- | | ---Totals--- | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DAP | Node | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev |
| 44 | 1 | 0.09 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.03 |
| | 2 | 0.05 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.02 |
| | 3 | 0.04 | 0.01 | 0.04 | 0.03 | 0.02 | 0.02 | 0.00 | 0.00 | 0.10 | 0.05 |
| | 4 | 0.05 | 0.02 | 0.18 | 0.04 | 0.04 | 0.01 | 0.00 | 0.00 | 0.27 | 0.06 |
| | 5 | 0.05 | 0.02 | 0.27 | 0.10 | 0.05 | 0.01 | 0.00 | 0.00 | 0.36 | 0.12 |
| | 6 | 0.06 | 0.02 | 0.33 | 0.11 | 0.06 | 0.02 | 0.00 | 0.00 | 0.45 | 0.15 |
| | 7 | 0.04 | 0.02 | 0.25 | 0.11 | 0.05 | 0.03 | 0.00 | 0.00 | 0.34 | 0.14 |
| | 8 | 0.02 | 0.03 | 0.09 | 0.13 | 0.01 | 0.02 | 0.00 | 0.00 | 0.13 | 0.17 |
| | 9 | 0.00 | 0.00 | 0.01 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.03 |
| | All | 0.40 | 0.12 | 1.17 | 0.33 | 0.22 | 0.07 | 0.00 | 0.00 | 1.86 | 0.58 |
| 57 | 1 | 0.06 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 | 0.02 |
| | 2 | 0.08 | 0.02 | 0.02 | 0.04 | 0.01 | 0.02 | 0.00 | 0.00 | 0.10 | 0.07 |
| | 3 | 0.07 | 0.02 | 0.08 | 0.06 | 0.05 | 0.04 | 0.00 | 0.00 | 0.19 | 0.10 |
| | 4 | 0.10 | 0.02 | 0.10 | 0.06 | 0.05 | 0.03 | 0.00 | 0.00 | 0.24 | 0.10 |
| | 5 | 0.11 | 0.03 | 0.21 | 0.04 | 0.06 | 0.02 | 0.00 | 0.00 | 0.37 | 0.05 |
| | 6 | 0.09 | 0.03 | 0.31 | 0.04 | 0.07 | 0.01 | 0.00 | 0.00 | 0.48 | 0.06 |
| | 7 | 0.07 | 0.02 | 0.38 | 0.05 | 0.09 | 0.02 | 0.00 | 0.00 | 0.54 | 0.09 |
| | 8 | 0.07 | 0.01 | 0.42 | 0.07 | 0.11 | 0.02 | 0.00 | 0.00 | 0.60 | 0.10 |
| | 9 | 0.07 | 0.02 | 0.42 | 0.18 | 0.11 | 0.04 | 0.00 | 0.00 | 0.61 | 0.22 |
| | 10 | 0.05 | 0.03 | 0.35 | 0.18 | 0.06 | 0.05 | 0.00 | 0.00 | 0.42 | 0.29 |
| | 11 | 0.02 | 0.02 | 0.10 | 0.14 | 0.02 | 0.02 | 0.00 | 0.00 | 0.14 | 0.18 |
| | 12 | 0.00 | 0.01 | 0.01 | 0.04 | 0.00 | 0.01 | 0.00 | 0.00 | 0.02 | 0.05 |
| | All | 0.81 | 0.22 | 2.35 | 0.62 | 0.63 | 0.21 | 0.00 | 0.00 | 3.90 | 1.04 |
| 70 | 1 | 0.15 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.06 |
| | 2 | 0.16 | 0.08 | 0.18 | 0.29 | 0.13 | 0.22 | 0.00 | 0.00 | 0.40 | 0.48 |
| | 3 | 0.12 | 0.07 | 0.20 | 0.21 | 0.18 | 0.20 | 0.00 | 0.00 | 0.46 | 0.40 |
| | 4 | 0.18 | 0.07 | 0.18 | 0.12 | 0.17 | 0.13 | 0.00 | 0.00 | 0.44 | 0.30 |
| | 5 | 0.23 | 0.06 | 0.19 | 0.13 | 0.19 | 0.13 | 0.00 | 0.00 | 0.53 | 0.27 |
| | 6 | 0.25 | 0.07 | 0.13 | 0.09 | 0.10 | 0.08 | 0.00 | 0.00 | 0.47 | 0.20 |
| | 7 | 0.22 | 0.06 | 0.21 | 0.15 | 0.18 | 0.10 | 0.00 | 0.00 | 0.61 | 0.24 |
| | 8 | 0.22 | 0.08 | 0.45 | 0.26 | 0.24 | 0.12 | 0.00 | 0.00 | 0.90 | 0.42 |
| | 9 | 0.20 | 0.08 | 0.34 | 0.16 | 0.15 | 0.08 | 0.00 | 0.00 | 0.68 | 0.28 |
| | 10 | 0.15 | 0.04 | 0.51 | 0.12 | 0.10 | 0.04 | 0.00 | 0.00 | 0.74 | 0.18 |
| | 11 | 0.14 | 0.04 | 0.59 | 0.16 | 0.17 | 0.04 | 0.00 | 0.00 | 0.86 | 0.22 |
| | 12 | 0.11 | 0.04 | 0.61 | 0.16 | 0.18 | 0.05 | 0.00 | 0.00 | 0.87 | 0.27 |
| | 13 | 0.09 | 0.04 | 0.44 | 0.17 | 0.16 | 0.06 | 0.00 | 0.00 | 0.65 | 0.25 |
| | 14 | 0.08 | 0.03 | 0.45 | 0.16 | 0.12 | 0.05 | 0.00 | 0.00 | 0.50 | 0.34 |
| | 15 | 0.02 | 0.02 | 0.07 | 0.11 | 0.03 | 0.05 | 0.00 | 0.00 | 0.11 | 0.18 |
| | All | 2.24 | 0.73 | 4.31 | 1.10 | 1.82 | 0.65 | 0.00 | 0.00 | 8.37 | 2.37 |
| 79 | 1 | 0.21 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.21 | 0.12 |
| | 2 | 0.16 | 0.04 | 0.05 | 0.13 | 0.02 | 0.05 | 0.00 | 0.00 | 0.22 | 0.18 |
| | 3 | 0.13 | 0.05 | 0.15 | 0.19 | 0.14 | 0.15 | 0.00 | 0.00 | 0.37 | 0.33 |
| | 4 | 0.17 | 0.05 | 0.19 | 0.21 | 0.31 | 0.36 | 0.00 | 0.00 | 0.66 | 0.56 |
| | 5 | 0.24 | 0.05 | 0.19 | 0.16 | 0.32 | 0.27 | 0.00 | 0.00 | 0.69 | 0.44 |
| | 6 | 0.26 | 0.06 | 0.14 | 0.11 | 0.17 | 0.11 | 0.00 | 0.00 | 0.57 | 0.20 |
| | 7 | 0.25 | 0.07 | 0.41 | 0.13 | 0.33 | 0.10 | 0.00 | 0.00 | 0.97 | 0.18 |
| | 8 | 0.23 | 0.06 | 0.47 | 0.25 | 0.30 | 0.13 | 0.00 | 0.00 | 0.96 | 0.41 |
| | 9 | 0.22 | 0.09 | 0.37 | 0.17 | 0.15 | 0.06 | 0.00 | 0.00 | 0.74 | 0.18 |
| | 10 | 0.17 | 0.06 | 0.50 | 0.14 | 0.11 | 0.07 | 0.00 | 0.00 | 0.78 | 0.20 |
| | 11 | 0.11 | 0.04 | 0.43 | 0.12 | 0.09 | 0.06 | 0.00 | 0.00 | 0.63 | 0.16 |
| | 12 | 0.11 | 0.04 | 0.56 | 0.15 | 0.12 | 0.05 | 0.00 | 0.00 | 0.79 | 0.17 |
| | 13 | 0.07 | 0.03 | 0.48 | 0.13 | 0.15 | 0.03 | 0.00 | 0.00 | 0.67 | 0.18 |
| | 14 | 0.05 | 0.03 | 0.47 | 0.10 | 0.13 | 0.02 | 0.00 | 0.00 | 0.60 | 0.21 |
| | 15 | 0.05 | 0.02 | 0.41 | 0.15 | 0.09 | 0.05 | 0.00 | 0.00 | 0.46 | 0.28 |
| | 16 | 0.03 | 0.02 | 0.21 | 0.17 | 0.05 | 0.03 | 0.00 | 0.00 | 0.24 | 0.22 |
| | 17 | 0.01 | 0.02 | 0.10 | 0.11 | 0.03 | 0.03 | 0.00 | 0.00 | 0.08 | 0.14 |
| | All | 2.42 | 0.43 | 4.90 | 1.31 | 2.38 | 0.76 | 0.00 | 0.00 | 9.75 | 2.18 |

(cont'd)

TABLE 3. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 90 | 1 | 0.23 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.22 | 0.10 |
| | 2 | 0.18 | 0.08 | 0.18 | 0.18 | 0.18 | 0.19 | 0.00 | 0.00 | 0.46 | 0.35 |
| | 3 | 0.17 | 0.04 | 0.51 | 0.37 | 0.71 | 0.60 | 0.00 | 0.00 | 1.16 | 1.01 |
| | 4 | 0.23 | 0.06 | 0.50 | 0.35 | 0.53 | 0.36 | 0.00 | 0.00 | 0.98 | 0.77 |
| | 5 | 0.25 | 0.08 | 0.31 | 0.23 | 0.31 | 0.28 | 0.00 | 0.00 | 0.70 | 0.58 |
| | 6 | 0.26 | 0.10 | 0.21 | 0.08 | 0.21 | 0.09 | 0.00 | 0.00 | 0.57 | 0.28 |
| | 7 | 0.21 | 0.07 | 0.34 | 0.15 | 0.47 | 0.12 | 0.00 | 0.00 | 0.96 | 0.32 |
| | 8 | 0.21 | 0.10 | 0.44 | 0.20 | 0.36 | 0.18 | 0.00 | 0.00 | 0.89 | 0.44 |
| | 9 | 0.26 | 0.08 | 0.33 | 0.15 | 0.24 | 0.15 | 0.00 | 0.00 | 0.77 | 0.32 |
| | 10 | 0.25 | 0.08 | 0.34 | 0.17 | 0.16 | 0.08 | 0.00 | 0.00 | 0.69 | 0.26 |
| | 11 | 0.26 | 0.08 | 0.49 | 0.11 | 0.17 | 0.06 | 0.00 | 0.00 | 0.86 | 0.27 |
| | 12 | 0.21 | 0.12 | 0.52 | 0.10 | 0.15 | 0.04 | 0.00 | 0.00 | 0.83 | 0.30 |
| | 13 | 0.21 | 0.06 | 0.49 | 0.13 | 0.13 | 0.06 | 0.00 | 0.00 | 0.78 | 0.29 |
| | 14 | 0.13 | 0.05 | 0.42 | 0.14 | 0.11 | 0.04 | 0.00 | 0.00 | 0.62 | 0.24 |
| | 15 | 0.11 | 0.03 | 0.33 | 0.13 | 0.09 | 0.03 | 0.00 | 0.00 | 0.47 | 0.22 |
| | 16 | 0.09 | 0.02 | 0.22 | 0.08 | 0.08 | 0.03 | 0.00 | 0.00 | 0.29 | 0.19 |
| | 17 | 0.07 | 0.08 | 0.18 | 0.06 | 0.06 | 0.04 | 0.00 | 0.00 | 0.23 | 0.18 |
| | 18 | 0.02 | 0.02 | 0.07 | 0.05 | 0.02 | 0.02 | 0.00 | 0.00 | 0.10 | 0.08 |
| | 19 | 0.00 | 0.00 | 0.02 | 0.03 | 0.00 | 0.01 | 0.00 | 0.00 | 0.02 | 0.04 |
| | 20 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 |
| | All | 3.30 | 0.76 | 5.47 | 1.46 | 3.64 | 1.22 | 0.00 | 0.00 | 11.64 | 4.24 |
| 100 | 1 | 0.12 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 0.09 |
| | 2 | 0.11 | 0.10 | 0.06 | 0.11 | 0.04 | 0.09 | 0.00 | 0.00 | 0.22 | 0.21 |
| | 3 | 0.12 | 0.04 | 0.20 | 0.24 | 0.30 | 0.33 | 0.02 | 0.02 | 0.63 | 0.56 |
| | 4 | 0.38 | 0.19 | 0.67 | 0.50 | 0.60 | 0.39 | 0.06 | 0.04 | 1.71 | 0.95 |
| | 5 | 0.46 | 0.12 | 0.20 | 0.27 | 0.24 | 0.30 | 0.03 | 0.04 | 0.93 | 0.60 |
| | 6 | 0.49 | 0.16 | 0.38 | 0.29 | 0.37 | 0.29 | 0.06 | 0.04 | 1.29 | 0.62 |
| | 7 | 0.45 | 0.14 | 0.49 | 0.28 | 0.60 | 0.24 | 0.07 | 0.04 | 1.61 | 0.57 |
| | 8 | 0.46 | 0.10 | 0.55 | 0.29 | 0.68 | 0.36 | 0.12 | 0.06 | 1.82 | 0.72 |
| | 9 | 0.42 | 0.13 | 0.45 | 0.24 | 0.59 | 0.32 | 0.10 | 0.04 | 1.56 | 0.63 |
| | 10 | 0.49 | 0.17 | 0.50 | 0.16 | 0.36 | 0.18 | 0.08 | 0.04 | 1.31 | 0.42 |
| | 11 | 0.00 | 0.00 | 0.56 | 0.19 | 0.27 | 0.06 | 0.07 | 0.03 | 0.90 | 0.23 |
| | 12 | 0.00 | 0.00 | 0.59 | 0.15 | 0.26 | 0.08 | 0.10 | 0.05 | 0.94 | 0.25 |
| | 13 | 0.23 | 0.09 | 0.72 | 0.19 | 0.25 | 0.06 | 0.09 | 0.04 | 1.29 | 0.30 |
| | 14 | 0.19 | 0.07 | 0.52 | 0.15 | 0.23 | 0.06 | 0.11 | 0.04 | 1.05 | 0.27 |
| | 15 | 0.14 | 0.06 | 0.50 | 0.17 | 0.16 | 0.06 | 0.10 | 0.04 | 0.89 | 0.28 |
| | 16 | 0.09 | 0.04 | 0.31 | 0.15 | 0.12 | 0.07 | 0.09 | 0.04 | 0.61 | 0.24 |
| | 17 | 0.05 | 0.03 | 0.29 | 0.10 | 0.10 | 0.04 | 0.06 | 0.04 | 0.49 | 0.17 |
| | 18 | 0.02 | 0.02 | 0.16 | 0.10 | 0.10 | 0.07 | 0.04 | 0.03 | 0.30 | 0.20 |
| | 19 | 0.01 | 0.02 | 0.06 | 0.07 | 0.02 | 0.02 | 0.01 | 0.02 | 0.10 | 0.12 |
| | 20 | 0.00 | 0.00 | 0.02 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.03 |
| | All | 4.11 | 0.96 | 7.24 | 1.72 | 5.25 | 1.61 | 1.20 | 0.34 | 17.80 | 4.10 |
| 113 | 1 | 0.21 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.21 | 0.11 |
| | 2 | 0.18 | 0.08 | 0.09 | 0.13 | 0.12 | 0.16 | 0.08 | 0.10 | 0.40 | 0.35 |
| | 3 | 0.19 | 0.06 | 0.15 | 0.17 | 0.18 | 0.25 | 0.11 | 0.16 | 0.56 | 0.55 |
| | 4 | 0.25 | 0.07 | 0.31 | 0.34 | 0.32 | 0.48 | 0.33 | 0.43 | 1.05 | 1.18 |
| | 5 | 0.33 | 0.09 | 0.28 | 0.30 | 0.47 | 0.56 | 0.27 | 0.30 | 1.34 | 1.18 |
| | 6 | 0.35 | 0.12 | 0.35 | 0.26 | 0.50 | 0.43 | 0.33 | 0.32 | 1.54 | 1.04 |
| | 7 | 0.36 | 0.11 | 0.52 | 0.23 | 0.65 | 0.31 | 0.43 | 0.22 | 1.96 | 0.80 |
| | 8 | 0.38 | 0.08 | 0.37 | 0.11 | 0.61 | 0.13 | 0.35 | 0.13 | 1.51 | 0.35 |
| | 9 | 0.33 | 0.07 | 0.28 | 0.19 | 0.31 | 0.31 | 0.32 | 0.22 | 1.25 | 0.73 |
| | 10 | 0.32 | 0.07 | 0.31 | 0.15 | 0.17 | 0.10 | 0.27 | 0.11 | 1.07 | 0.31 |
| | 11 | 0.31 | 0.07 | 0.49 | 0.15 | 0.27 | 0.11 | 0.27 | 0.09 | 1.35 | 0.28 |
| | 12 | 0.27 | 0.09 | 0.62 | 0.09 | 0.20 | 0.09 | 0.32 | 0.10 | 1.40 | 0.24 |
| | 13 | 0.24 | 0.06 | 0.48 | 0.11 | 0.15 | 0.09 | 0.31 | 0.12 | 1.19 | 0.31 |
| | 14 | 0.14 | 0.04 | 0.46 | 0.10 | 0.10 | 0.05 | 0.40 | 0.12 | 1.10 | 0.20 |
| | 15 | 0.11 | 0.05 | 0.35 | 0.10 | 0.09 | 0.03 | 0.46 | 0.28 | 1.02 | 0.36 |
| | 16 | 0.07 | 0.02 | 0.28 | 0.09 | 0.10 | 0.06 | 0.26 | 0.17 | 0.72 | 0.27 |
| | 17 | 0.05 | 0.02 | 0.21 | 0.09 | 0.05 | 0.03 | 0.17 | 0.10 | 0.48 | 0.22 |
| | 18 | 0.02 | 0.02 | 0.12 | 0.10 | 0.04 | 0.04 | 0.13 | 0.14 | 0.22 | 0.25 |
| | 19 | 0.00 | 0.01 | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 0.04 | 0.03 | 0.07 |
| | All | 4.09 | 0.93 | 5.51 | 1.12 | 4.09 | 1.72 | 4.68 | 1.68 | 18.37 | 4.96 |

TABLE 3. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 127 | 1 | 0.07 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.03 |
| | 2 | 0.07 | 0.03 | 0.09 | 0.20 | 0.20 | 0.32 | 0.26 | 0.57 | 0.51 | 0.98 |
| | 3 | 0.09 | 0.03 | 0.22 | 0.23 | 0.13 | 0.21 | 0.44 | 0.47 | 0.88 | 0.85 |
| | 4 | 0.15 | 0.06 | 0.39 | 0.31 | 0.25 | 0.31 | 0.00 | 0.00 | 0.78 | 0.51 |
| | 5 | 0.17 | 0.06 | 0.20 | 0.29 | 0.18 | 0.38 | 0.38 | 0.50 | 0.89 | 1.11 |
| | 6 | 0.21 | 0.08 | 0.31 | 0.25 | 0.46 | 0.41 | 0.71 | 0.43 | 1.58 | 1.02 |
| | 7 | 0.24 | 0.07 | 0.50 | 0.21 | 0.44 | 0.28 | 1.07 | 0.43 | 2.25 | 0.82 |
| | 8 | 0.25 | 0.09 | 0.48 | 0.25 | 0.27 | 0.21 | 0.00 | 0.00 | 1.00 | 0.48 |
| | 9 | 0.21 | 0.10 | 0.37 | 0.18 | 0.18 | 0.12 | 1.21 | 0.69 | 1.96 | 0.96 |
| | 10 | 0.24 | 0.07 | 0.26 | 0.11 | 0.19 | 0.17 | 0.89 | 0.35 | 1.57 | 0.61 |
| | 11 | 0.26 | 0.10 | 0.28 | 0.18 | 0.15 | 0.13 | 0.76 | 0.33 | 1.45 | 0.56 |
| | 12 | 0.23 | 0.10 | 0.34 | 0.16 | 0.26 | 0.17 | 0.83 | 0.38 | 1.65 | 0.67 |
| | 13 | 0.18 | 0.08 | 0.51 | 0.22 | 0.21 | 0.08 | 0.00 | 0.00 | 0.90 | 0.35 |
| | 14 | 0.14 | 0.07 | 0.34 | 0.16 | 0.17 | 0.08 | 0.80 | 0.32 | 1.45 | 0.54 |
| | 15 | 0.10 | 0.05 | 0.39 | 0.17 | 0.11 | 0.06 | 0.73 | 0.40 | 1.34 | 0.61 |
| | 16 | 0.05 | 0.04 | 0.28 | 0.14 | 0.09 | 0.05 | 0.62 | 0.34 | 1.04 | 0.46 |
| | 17 | 0.04 | 0.03 | 0.23 | 0.15 | 0.06 | 0.04 | 0.44 | 0.29 | 0.78 | 0.47 |
| | 18 | 0.02 | 0.03 | 0.11 | 0.08 | 0.04 | 0.03 | 0.28 | 0.22 | 0.45 | 0.34 |
| | 19 | 0.01 | 0.01 | 0.04 | 0.06 | 0.01 | 0.01 | 0.16 | 0.17 | 0.17 | 0.23 |
| | 20 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.01 | 0.03 | 0.02 | 0.04 |
| | All | 2.72 | 0.93 | 5.30 | 1.53 | 3.23 | 1.25 | 9.47 | 2.75 | 20.72 | 5.95 |
| 139 | 1 | 0.12 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 0.03 |
| | 2 | 0.09 | 0.03 | 0.03 | 0.06 | 0.03 | 0.06 | 0.13 | 0.20 | 0.27 | 0.31 |
| | 3 | 0.08 | 0.03 | 0.13 | 0.16 | 0.12 | 0.14 | 0.69 | 1.12 | 1.01 | 1.40 |
| | 4 | 0.09 | 0.04 | 0.12 | 0.12 | 0.12 | 0.12 | 0.54 | 0.44 | 0.88 | 0.67 |
| | 5 | 0.09 | 0.05 | 0.07 | 0.09 | 0.09 | 0.10 | 0.38 | 0.39 | 0.64 | 0.56 |
| | 6 | 0.13 | 0.03 | 0.14 | 0.14 | 0.16 | 0.17 | 0.66 | 0.49 | 1.08 | 0.77 |
| | 7 | 0.10 | 0.03 | 0.22 | 0.11 | 0.20 | 0.15 | 1.28 | 0.70 | 1.81 | 0.87 |
| | 8 | 0.13 | 0.04 | 0.21 | 0.09 | 0.23 | 0.09 | 1.36 | 0.51 | 1.92 | 0.61 |
| | 9 | 0.10 | 0.03 | 0.17 | 0.11 | 0.16 | 0.16 | 1.49 | 0.72 | 1.92 | 0.93 |
| | 10 | 0.11 | 0.04 | 0.09 | 0.08 | 0.07 | 0.05 | 0.95 | 0.50 | 1.23 | 0.55 |
| | 11 | 0.11 | 0.03 | 0.15 | 0.10 | 0.06 | 0.04 | 0.82 | 0.34 | 1.15 | 0.39 |
| | 12 | 0.11 | 0.06 | 0.23 | 0.11 | 0.07 | 0.05 | 0.96 | 0.33 | 1.37 | 0.35 |
| | 13 | 0.10 | 0.04 | 0.23 | 0.08 | 0.03 | 0.02 | 1.08 | 0.39 | 1.44 | 0.47 |
| | 14 | 0.09 | 0.03 | 0.18 | 0.07 | 0.04 | 0.01 | 0.98 | 0.39 | 1.28 | 0.39 |
| | 15 | 0.06 | 0.03 | 0.18 | 0.05 | 0.02 | 0.02 | 0.83 | 0.29 | 1.07 | 0.32 |
| | 16 | 0.04 | 0.03 | 0.08 | 0.06 | 0.00 | 0.00 | 0.75 | 0.45 | 0.88 | 0.50 |
| | 17 | 0.02 | 0.01 | 0.07 | 0.02 | 0.00 | 0.00 | 0.77 | 0.52 | 0.28 | 0.41 |
| | 18 | 0.00 | 0.00 | 0.03 | 0.02 | 0.01 | 0.01 | 0.00 | 0.00 | 0.04 | 0.03 |
| | 19 | 0.00 | 0.01 | 0.02 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.03 |
| | All | 1.58 | 0.49 | 2.32 | 0.58 | 1.42 | 0.45 | 13.09 | 4.25 | 18.41 | 5.03 |
| 149 | 1 | 0.07 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.07 |
| | 2 | 0.09 | 0.02 | 0.00 | 0.00 | 0.07 | 0.19 | 0.30 | 0.59 | 0.45 | 0.77 |
| | 3 | 0.06 | 0.02 | 0.00 | 0.00 | 0.10 | 0.17 | 0.49 | 0.62 | 0.52 | 0.73 |
| | 4 | 0.09 | 0.03 | 0.01 | 0.01 | 0.12 | 0.10 | 0.00 | 0.00 | 0.22 | 0.12 |
| | 5 | 0.10 | 0.03 | 0.00 | 0.00 | 0.08 | 0.07 | 0.52 | 0.56 | 0.71 | 0.61 |
| | 6 | 0.13 | 0.05 | 0.01 | 0.01 | 0.12 | 0.07 | 0.87 | 0.48 | 1.14 | 0.54 |
| | 7 | 0.10 | 0.06 | 0.02 | 0.02 | 0.25 | 0.07 | 1.91 | 0.79 | 2.27 | 0.82 |
| | 8 | 0.17 | 0.05 | 0.01 | 0.01 | 0.18 | 0.09 | 0.00 | 0.00 | 0.36 | 0.11 |
| | 9 | 0.12 | 0.06 | 0.01 | 0.01 | 0.15 | 0.12 | 2.17 | 0.90 | 2.44 | 1.05 |
| | 10 | 0.13 | 0.03 | 0.00 | 0.00 | 0.07 | 0.07 | 1.41 | 0.51 | 1.61 | 0.58 |
| | 11 | 0.14 | 0.04 | 0.00 | 0.00 | 0.04 | 0.02 | 1.39 | 0.31 | 1.57 | 0.34 |
| | 12 | 0.13 | 0.05 | 0.00 | 0.00 | 0.04 | 0.02 | 1.37 | 0.29 | 1.54 | 0.31 |
| | 13 | 0.09 | 0.03 | 0.00 | 0.00 | 0.03 | 0.02 | 0.00 | 0.00 | 0.12 | 0.03 |
| | 14 | 0.07 | 0.02 | 0.00 | 0.00 | 0.03 | 0.02 | 1.40 | 0.41 | 1.50 | 0.42 |
| | 15 | 0.05 | 0.01 | 0.00 | 0.00 | 0.02 | 0.01 | 1.24 | 0.51 | 1.31 | 0.52 |
| | 16 | 0.04 | 0.02 | 0.00 | 0.01 | 0.02 | 0.02 | 1.20 | 0.66 | 0.95 | 0.80 |
| | 17 | 0.02 | 0.02 | 0.00 | 0.00 | 0.01 | 0.01 | 0.58 | 0.31 | 0.51 | 0.35 |
| | 18 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.50 | 0.39 | 0.39 | 0.41 |
| | 20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.14 | 0.04 | 0.14 |
| | All | 1.63 | 0.48 | 0.04 | 0.04 | 1.31 | 0.47 | 14.97 | 1.96 | 17.96 | 2.54 |

TABLE 4. Aerial potassium accumulation means and standard deviations for each day after planting (DAP), node, and plant part. Values are in kg/ha, and planting date was 143 (23 May).

| | | ---Stems--- | | ---Leaves--- | | --Petioles-- | | ----Pods---- | | ---Totals--- | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DAP | Node | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev |
| 44 | 1 | 1.24 | 0.47 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.24 | 0.47 |
| | 2 | 0.64 | 0.16 | 0.25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.66 | 0.19 |
| | 3 | 0.52 | 0.13 | 0.29 | 0.21 | 0.38 | 0.49 | 0.00 | 0.00 | 1.19 | 0.66 |
| | 4 | 0.66 | 0.22 | 1.60 | 0.48 | 0.96 | 0.34 | 0.00 | 0.00 | 3.22 | 0.96 |
| | 5 | 0.75 | 0.27 | 2.26 | 0.94 | 1.17 | 0.39 | 0.00 | 0.00 | 4.18 | 1.42 |
| | 6 | 0.82 | 0.26 | 2.82 | 1.03 | 1.09 | 0.41 | 0.00 | 0.00 | 4.72 | 1.63 |
| | 7 | 0.63 | 0.32 | 1.69 | 0.85 | 0.72 | 0.41 | 0.00 | 0.00 | 3.04 | 1.34 |
| | 8 | 0.33 | 0.49 | 0.57 | 0.78 | 0.20 | 0.28 | 0.00 | 0.00 | 1.09 | 1.41 |
| | 9 | 0.00 | 0.00 | 0.05 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.13 |
| | All | 5.58 | 1.86 | 9.30 | 3.00 | 4.51 | 1.56 | 0.00 | 0.00 | 19.38 | 6.15 |
| 57 | 1 | 1.12 | 0.33 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.12 | 0.33 |
| | 2 | 0.80 | 0.20 | 0.12 | 0.29 | 0.13 | 0.31 | 0.00 | 0.00 | 1.04 | 0.63 |
| | 3 | 0.66 | 0.16 | 0.56 | 0.40 | 0.58 | 0.47 | 0.00 | 0.00 | 1.80 | 0.92 |
| | 4 | 0.92 | 0.25 | 0.72 | 0.43 | 0.72 | 0.43 | 0.00 | 0.00 | 2.36 | 0.93 |
| | 5 | 1.00 | 0.27 | 1.58 | 0.36 | 1.37 | 0.32 | 0.00 | 0.00 | 3.94 | 0.69 |
| | 6 | 1.08 | 0.34 | 2.34 | 0.45 | 1.62 | 0.40 | 0.00 | 0.00 | 5.04 | 1.05 |
| | 7 | 1.03 | 0.26 | 2.97 | 0.49 | 1.92 | 0.49 | 0.00 | 0.00 | 5.91 | 1.12 |
| | 8 | 1.14 | 0.27 | 3.24 | 0.61 | 2.12 | 0.51 | 0.00 | 0.00 | 6.50 | 1.28 |
| | 9 | 1.10 | 0.36 | 2.75 | 0.87 | 1.56 | 0.64 | 0.00 | 0.00 | 5.40 | 1.85 |
| | 10 | 0.77 | 0.48 | 1.79 | 0.95 | 0.78 | 0.65 | 0.00 | 0.00 | 3.11 | 2.15 |
| | 11 | 0.27 | 0.34 | 0.37 | 0.53 | 0.21 | 0.29 | 0.00 | 0.00 | 0.84 | 1.13 |
| | 12 | 0.05 | 0.12 | 0.04 | 0.11 | 0.03 | 0.08 | 0.00 | 0.00 | 0.12 | 0.31 |
| | All | 9.92 | 2.87 | 16.25 | 3.62 | 11.02 | 3.23 | 0.00 | 0.00 | 37.19 | 9.51 |
| 70 | 1 | 1.56 | 0.65 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.56 | 0.65 |
| | 2 | 1.35 | 0.60 | 1.26 | 1.98 | 2.59 | 4.33 | 0.00 | 0.00 | 4.23 | 5.96 |
| | 3 | 1.04 | 0.45 | 1.59 | 1.52 | 2.92 | 3.20 | 0.00 | 0.00 | 5.55 | 4.88 |
| | 4 | 1.38 | 0.53 | 1.20 | 1.03 | 2.40 | 2.30 | 0.00 | 0.00 | 4.98 | 3.60 |
| | 5 | 1.63 | 0.57 | 1.40 | 1.04 | 3.24 | 2.08 | 0.00 | 0.00 | 5.28 | 3.35 |
| | 6 | 1.75 | 0.66 | 0.98 | 0.69 | 1.82 | 1.35 | 0.00 | 0.00 | 4.43 | 2.27 |
| | 7 | 1.86 | 0.66 | 1.44 | 0.84 | 3.01 | 1.68 | 0.00 | 0.00 | 6.31 | 2.68 |
| | 8 | 1.94 | 0.63 | 2.87 | 1.16 | 4.39 | 1.90 | 0.00 | 0.00 | 9.20 | 3.40 |
| | 9 | 2.04 | 0.82 | 2.75 | 0.88 | 3.13 | 1.00 | 0.00 | 0.00 | 7.91 | 2.38 |
| | 10 | 2.15 | 0.59 | 3.08 | 0.74 | 2.77 | 0.77 | 0.00 | 0.00 | 7.83 | 2.00 |
| | 11 | 2.57 | 0.87 | 3.90 | 1.05 | 3.28 | 0.69 | 0.00 | 0.00 | 9.38 | 2.80 |
| | 12 | 2.53 | 0.87 | 4.08 | 1.41 | 3.67 | 0.89 | 0.00 | 0.00 | 9.82 | 3.45 |
| | 13 | 2.19 | 0.73 | 3.40 | 1.35 | 2.55 | 0.95 | 0.00 | 0.00 | 8.14 | 2.93 |
| | 14 | 1.42 | 0.84 | 2.20 | 1.15 | 1.81 | 0.75 | 0.00 | 0.00 | 4.92 | 3.00 |
| | 15 | 0.29 | 0.45 | 0.34 | 0.54 | 0.35 | 0.54 | 0.00 | 0.00 | 0.98 | 1.52 |
| | All | 25.52 | 8.65 | 29.59 | 8.12 | 35.41 | 10.12 | 0.00 | 0.00 | 90.52 | 25.89 |
| 79 | 1 | 2.05 | 0.61 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.05 | 0.61 |
| | 2 | 1.46 | 0.31 | 0.39 | 1.01 | 0.46 | 1.24 | 0.00 | 0.00 | 2.32 | 2.19 |
| | 3 | 1.15 | 0.25 | 1.41 | 1.79 | 3.31 | 4.40 | 0.00 | 0.00 | 5.28 | 5.99 |
| | 4 | 1.67 | 0.33 | 1.46 | 1.66 | 3.15 | 3.31 | 0.00 | 0.00 | 6.28 | 4.80 |
| | 5 | 1.94 | 0.52 | 1.22 | 1.08 | 3.23 | 2.76 | 0.00 | 0.00 | 5.99 | 4.01 |
| | 6 | 2.12 | 0.58 | 1.19 | 0.91 | 2.36 | 1.71 | 0.00 | 0.00 | 5.68 | 2.82 |
| | 7 | 2.24 | 0.54 | 3.06 | 1.14 | 5.98 | 1.92 | 0.00 | 0.00 | 11.28 | 3.00 |
| | 8 | 2.31 | 0.57 | 2.81 | 1.13 | 5.81 | 2.30 | 0.00 | 0.00 | 10.40 | 4.04 |
| | 9 | 2.30 | 0.66 | 2.35 | 0.64 | 3.69 | 1.08 | 0.00 | 0.00 | 8.34 | 1.78 |
| | 10 | 2.40 | 0.79 | 3.47 | 0.97 | 3.51 | 0.80 | 0.00 | 0.00 | 9.39 | 2.03 |
| | 11 | 2.56 | 0.72 | 3.87 | 0.84 | 3.13 | 0.71 | 0.00 | 0.00 | 9.56 | 2.06 |
| | 12 | 2.34 | 0.67 | 3.33 | 0.48 | 3.00 | 0.63 | 0.00 | 0.00 | 8.67 | 1.53 |
| | 13 | 1.92 | 0.43 | 3.22 | 0.38 | 2.68 | 0.50 | 0.00 | 0.00 | 7.81 | 1.05 |
| | 14 | 1.56 | 0.35 | 2.69 | 0.50 | 2.23 | 0.40 | 0.00 | 0.00 | 5.98 | 2.02 |
| | 15 | 1.23 | 0.44 | 2.20 | 0.66 | 1.51 | 0.90 | 0.00 | 0.00 | 4.23 | 2.59 |
| | 16 | 0.77 | 0.45 | 1.20 | 0.92 | 0.69 | 0.58 | 0.00 | 0.00 | 2.22 | 2.00 |
| | 17 | 0.21 | 0.33 | 0.46 | 0.62 | 0.29 | 0.38 | 0.00 | 0.00 | 0.77 | 1.24 |
| | 18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.11 | 0.00 | 0.00 | 0.03 | 0.11 |
| | All | 29.44 | 6.66 | 33.14 | 6.78 | 43.68 | 11.94 | 0.00 | 0.00 | 106.26 | 21.33 |

TABLE 4. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 90 | 1 | 1.59 | 0.54 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.49 | 0.66 |
| | 2 | 1.33 | 0.35 | 1.47 | 1.41 | 2.27 | 2.55 | 0.04 | 0.06 | 4.42 | 4.05 |
| | 3 | 1.12 | 0.30 | 4.16 | 2.90 | 8.55 | 6.12 | 0.15 | 0.16 | 12.05 | 9.82 |
| | 4 | 1.69 | 0.54 | 3.93 | 2.50 | 6.11 | 5.65 | 0.10 | 0.08 | 9.58 | 8.41 |
| | 5 | 1.73 | 0.59 | 2.24 | 1.48 | 4.93 | 3.74 | 0.08 | 0.08 | 7.22 | 6.01 |
| | 6 | 1.96 | 0.49 | 1.88 | 1.13 | 3.27 | 1.55 | 0.08 | 0.04 | 6.51 | 3.16 |
| | 7 | 2.06 | 0.61 | 3.37 | 1.26 | 6.71 | 2.07 | 0.15 | 0.06 | 11.52 | 4.41 |
| | 8 | 2.13 | 0.55 | 3.60 | 1.47 | 6.48 | 2.94 | 0.20 | 0.06 | 11.00 | 5.69 |
| | 9 | 2.05 | 0.54 | 2.52 | 1.09 | 4.58 | 2.22 | 0.16 | 0.06 | 8.73 | 4.05 |
| | 10 | 2.30 | 0.63 | 2.33 | 0.94 | 3.09 | 1.44 | 0.11 | 0.03 | 7.33 | 3.01 |
| | 11 | 2.54 | 0.76 | 3.37 | 0.75 | 3.64 | 1.01 | 0.12 | 0.04 | 9.07 | 3.11 |
| | 12 | 2.35 | 0.67 | 3.68 | 0.58 | 3.27 | 0.83 | 0.13 | 0.05 | 8.84 | 2.85 |
| | 13 | 2.08 | 0.50 | 3.20 | 0.62 | 2.76 | 0.60 | 0.13 | 0.05 | 7.66 | 2.52 |
| | 14 | 1.75 | 0.48 | 2.78 | 0.69 | 2.27 | 0.59 | 0.11 | 0.04 | 6.47 | 2.35 |
| | 15 | 1.16 | 0.38 | 2.32 | 0.60 | 1.99 | 0.52 | 0.12 | 0.04 | 4.91 | 2.24 |
| | 16 | 0.90 | 0.25 | 1.74 | 0.77 | 1.44 | 0.52 | 0.07 | 0.03 | 3.55 | 2.04 |
| | 17 | 0.65 | 0.89 | 1.23 | 0.68 | 0.78 | 0.52 | 0.04 | 0.03 | 2.53 | 1.89 |
| | 18 | 0.23 | 0.19 | 0.60 | 0.42 | 0.34 | 0.24 | 0.03 | 0.03 | 1.01 | 0.81 |
| | 19 | 0.00 | 0.00 | 0.16 | 0.23 | 0.06 | 0.10 | 0.00 | 0.00 | 0.21 | 0.32 |
| | 20 | 0.00 | 0.00 | 0.03 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.08 |
| | All | 29.23 | 7.00 | 42.08 | 11.18 | 59.28 | 19.36 | 1.82 | 0.48 | 124.13 | 46.66 |
| 100 | 1 | 1.46 | 0.41 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.46 | 0.41 |
| | 2 | 1.38 | 0.41 | 0.34 | 0.62 | 0.83 | 1.69 | 0.07 | 0.14 | 2.62 | 2.45 |
| | 3 | 1.12 | 0.33 | 1.45 | 1.53 | 3.33 | 3.23 | 0.20 | 0.17 | 5.99 | 4.84 |
| | 4 | 1.60 | 0.45 | 2.89 | 2.14 | 5.46 | 3.50 | 0.41 | 0.31 | 10.35 | 5.96 |
| | 5 | 1.79 | 0.52 | 1.26 | 1.65 | 2.69 | 3.27 | 0.23 | 0.30 | 5.97 | 5.18 |
| | 6 | 2.04 | 0.75 | 3.57 | 3.50 | 5.14 | 3.56 | 0.47 | 0.26 | 11.10 | 6.97 |
| | 7 | 2.08 | 0.64 | 3.98 | 1.84 | 7.47 | 3.39 | 0.56 | 0.33 | 14.10 | 5.60 |
| | 8 | 2.13 | 0.65 | 4.12 | 1.93 | 7.64 | 3.92 | 0.86 | 0.40 | 14.75 | 6.11 |
| | 9 | 2.05 | 0.63 | 3.73 | 1.56 | 6.29 | 3.51 | 0.75 | 0.30 | 12.82 | 5.46 |
| | 10 | 2.22 | 0.75 | 3.19 | 0.90 | 4.75 | 1.85 | 0.63 | 0.28 | 10.79 | 2.76 |
| | 11 | 2.34 | 0.67 | 3.91 | 1.14 | 3.91 | 0.98 | 0.56 | 0.17 | 10.71 | 2.37 |
| | 12 | 2.10 | 0.61 | 3.51 | 0.74 | 3.54 | 0.83 | 0.72 | 0.33 | 9.87 | 2.12 |
| | 13 | 1.85 | 0.58 | 3.38 | 0.73 | 3.13 | 0.80 | 0.72 | 0.28 | 9.07 | 1.94 |
| | 14 | 1.47 | 0.53 | 2.93 | 0.71 | 2.51 | 0.57 | 0.84 | 0.28 | 7.75 | 1.77 |
| | 15 | 1.08 | 0.36 | 2.27 | 0.66 | 1.80 | 0.52 | 0.70 | 0.27 | 5.85 | 1.57 |
| | 16 | 0.84 | 0.29 | 1.87 | 0.72 | 1.37 | 0.61 | 0.56 | 0.23 | 4.64 | 1.63 |
| | 17 | 0.52 | 0.23 | 1.66 | 0.56 | 0.94 | 0.43 | 0.37 | 0.22 | 3.48 | 1.29 |
| | 18 | 0.25 | 0.17 | 1.03 | 0.63 | 0.58 | 0.44 | 0.24 | 0.21 | 2.10 | 1.29 |
| | 19 | 0.08 | 0.12 | 0.38 | 0.48 | 0.18 | 0.23 | 0.09 | 0.14 | 0.74 | 0.88 |
| | 20 | 0.00 | 0.01 | 0.10 | 0.20 | 0.05 | 0.10 | 0.00 | 0.00 | 0.15 | 0.30 |
| | All | 28.39 | 7.91 | 45.59 | 9.69 | 61.59 | 18.51 | 8.75 | 2.50 | 144.31 | 33.28 |
| 113 | 1 | 1.70 | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.70 | 0.80 |
| | 2 | 1.19 | 0.28 | 0.77 | 1.00 | 1.62 | 2.06 | 0.45 | 0.63 | 3.32 | 3.47 |
| | 3 | 0.94 | 0.25 | 1.07 | 1.27 | 1.98 | 2.58 | 0.61 | 0.92 | 4.19 | 4.55 |
| | 4 | 1.20 | 0.34 | 1.87 | 2.54 | 3.64 | 5.19 | 1.81 | 2.30 | 8.07 | 9.76 |
| | 5 | 1.50 | 0.45 | 2.14 | 2.34 | 4.48 | 5.38 | 1.49 | 1.48 | 9.62 | 9.29 |
| | 6 | 1.66 | 0.63 | 2.71 | 2.22 | 6.15 | 5.30 | 1.87 | 1.72 | 12.40 | 9.46 |
| | 7 | 1.64 | 0.44 | 4.09 | 1.75 | 7.19 | 3.22 | 2.43 | 1.19 | 15.35 | 6.12 |
| | 8 | 1.73 | 0.37 | 3.34 | 1.00 | 5.31 | 1.98 | 2.55 | 1.06 | 12.94 | 3.70 |
| | 9 | 1.59 | 0.41 | 2.36 | 1.74 | 3.60 | 2.70 | 2.10 | 1.15 | 9.65 | 5.70 |
| | 10 | 1.77 | 0.40 | 2.27 | 1.12 | 2.81 | 1.23 | 1.70 | 0.67 | 8.56 | 2.64 |
| | 11 | 1.90 | 0.43 | 3.20 | 1.00 | 3.28 | 0.84 | 1.91 | 0.60 | 10.29 | 2.24 |
| | 12 | 1.75 | 0.33 | 3.63 | 0.63 | 2.97 | 0.57 | 2.17 | 0.59 | 10.52 | 1.66 |
| | 13 | 4.34 | 5.04 | 2.88 | 0.65 | 2.47 | 0.50 | 2.24 | 0.88 | 11.93 | 5.09 |
| | 14 | 1.18 | 0.26 | 2.50 | 0.60 | 2.18 | 0.61 | 2.72 | 0.81 | 8.58 | 1.72 |
| | 15 | 0.94 | 0.23 | 2.13 | 0.76 | 1.63 | 0.58 | 2.48 | 0.90 | 7.18 | 1.95 |
| | 16 | 0.63 | 0.23 | 1.64 | 0.47 | 1.13 | 0.41 | 1.56 | 0.91 | 4.95 | 1.51 |
| | 17 | 0.38 | 0.20 | 1.18 | 0.54 | 0.74 | 0.46 | 1.09 | 0.52 | 3.38 | 1.57 |
| | 18 | 0.12 | 0.16 | 0.64 | 0.54 | 0.27 | 0.33 | 0.77 | 0.78 | 1.44 | 1.62 |
| | 19 | 0.03 | 0.06 | 0.06 | 0.13 | 0.03 | 0.06 | 0.10 | 0.32 | 0.22 | 0.49 |
| | All | 26.19 | 6.09 | 37.85 | 8.96 | 51.07 | 19.03 | 29.15 | 9.66 | 144.25 | 38.46 |

(cont'd)

TABLE 4. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 127 | 1 | 1.28 | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.28 | 0.51 |
| | 2 | 1.11 | 0.32 | 0.53 | 1.11 | 2.14 | 3.22 | 1.35 | 2.80 | 4.26 | 6.31 |
| | 3 | 0.89 | 0.24 | 1.39 | 1.56 | 2.86 | 3.18 | 2.35 | 2.59 | 7.50 | 7.27 |
| | 4 | 1.21 | 0.45 | 2.28 | 1.74 | 4.59 | 3.78 | 0.00 | 0.00 | 8.08 | 5.84 |
| | 5 | 3.95 | 4.96 | 1.40 | 2.09 | 2.26 | 4.11 | 1.70 | 2.09 | 8.95 | 11.59 |
| | 6 | 1.52 | 0.51 | 2.21 | 1.78 | 4.11 | 3.30 | 3.56 | 2.23 | 11.40 | 7.09 |
| | 7 | 1.52 | 0.43 | 3.37 | 1.42 | 5.80 | 2.40 | 5.33 | 2.17 | 16.02 | 5.93 |
| | 8 | 1.63 | 0.54 | 3.41 | 1.50 | 6.15 | 3.27 | 0.00 | 0.00 | 11.18 | 5.05 |
| | 9 | 1.57 | 0.57 | 2.70 | 1.28 | 4.48 | 2.94 | 5.87 | 3.03 | 14.62 | 7.43 |
| | 10 | 1.54 | 0.47 | 1.93 | 0.87 | 2.79 | 1.66 | 4.66 | 1.91 | 10.92 | 4.40 |
| | 11 | 1.63 | 0.57 | 1.96 | 0.91 | 2.21 | 1.13 | 3.80 | 1.63 | 9.60 | 3.64 |
| | 12 | 1.67 | 0.70 | 2.22 | 0.89 | 2.15 | 0.87 | 4.22 | 1.89 | 10.26 | 3.73 |
| | 13 | 1.45 | 0.63 | 2.15 | 0.75 | 1.96 | 0.71 | 0.00 | 0.00 | 5.55 | 2.01 |
| | 14 | 1.19 | 0.55 | 1.75 | 0.65 | 1.51 | 0.60 | 4.26 | 1.72 | 8.71 | 3.13 |
| | 15 | 0.92 | 0.44 | 1.51 | 0.67 | 1.17 | 0.53 | 3.90 | 2.04 | 7.50 | 3.37 |
| | 16 | 0.69 | 0.35 | 1.39 | 0.58 | 0.95 | 0.46 | 3.44 | 1.90 | 6.47 | 2.86 |
| | 17 | 0.43 | 0.27 | 0.91 | 0.49 | 0.60 | 0.40 | 2.41 | 1.57 | 4.34 | 2.55 |
| | 18 | 0.24 | 0.21 | 0.49 | 0.36 | 0.26 | 0.21 | 1.50 | 1.21 | 2.50 | 1.89 |
| | 19 | 0.08 | 0.11 | 0.15 | 0.23 | 0.09 | 0.13 | 0.86 | 0.95 | 0.96 | 1.31 |
| | 20 | 0.01 | 0.02 | 0.02 | 0.05 | 0.01 | 0.03 | 0.05 | 0.15 | 0.09 | 0.23 |
| | All | 24.53 | 8.51 | 31.41 | 9.16 | 45.54 | 18.86 | 48.71 | 14.08 | 150.18 | 47.82 |
| 139 | 1 | 1.10 | 0.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.10 | 0.32 |
| | 2 | 0.72 | 0.19 | 0.33 | 0.57 | 0.60 | 0.97 | 0.73 | 1.16 | 2.30 | 2.59 |
| | 3 | 0.60 | 0.20 | 1.03 | 1.29 | 2.60 | 3.02 | 3.46 | 5.44 | 7.68 | 9.66 |
| | 4 | 0.80 | 0.30 | 0.93 | 0.93 | 2.59 | 2.26 | 2.93 | 2.35 | 7.25 | 5.46 |
| | 5 | 0.91 | 0.35 | 0.62 | 0.72 | 1.74 | 1.66 | 2.07 | 2.21 | 5.34 | 4.39 |
| | 6 | 1.07 | 0.31 | 1.14 | 1.09 | 2.85 | 2.60 | 3.80 | 3.02 | 8.86 | 6.61 |
| | 7 | 1.09 | 0.31 | 2.01 | 0.92 | 4.60 | 2.60 | 6.39 | 3.22 | 14.08 | 6.41 |
| | 8 | 1.23 | 0.30 | 1.75 | 0.80 | 4.11 | 2.28 | 6.82 | 2.57 | 13.91 | 5.20 |
| | 9 | 1.19 | 0.29 | 1.43 | 0.94 | 2.93 | 2.05 | 7.53 | 3.67 | 13.08 | 6.42 |
| | 10 | 1.21 | 0.26 | 0.79 | 0.66 | 1.54 | 1.15 | 4.97 | 2.56 | 8.51 | 3.81 |
| | 11 | 1.23 | 0.25 | 0.87 | 0.57 | 1.02 | 0.52 | 4.28 | 1.68 | 7.40 | 2.23 |
| | 12 | 1.20 | 0.24 | 1.20 | 0.55 | 1.29 | 0.30 | 4.77 | 1.61 | 8.46 | 1.93 |
| | 13 | 1.11 | 0.26 | 1.40 | 0.37 | 1.20 | 0.31 | 5.11 | 1.74 | 8.83 | 2.30 |
| | 14 | 0.90 | 0.29 | 1.19 | 0.30 | 0.97 | 0.20 | 5.04 | 2.19 | 8.10 | 2.44 |
| | 15 | 0.74 | 0.28 | 0.89 | 0.27 | 0.75 | 0.25 | 4.82 | 1.58 | 7.20 | 1.90 |
| | 16 | 0.47 | 0.22 | 0.69 | 0.33 | 0.54 | 0.30 | 4.03 | 2.10 | 5.73 | 2.64 |
| | 17 | 0.30 | 0.20 | 0.52 | 0.24 | 0.31 | 0.16 | 2.54 | 1.64 | 3.67 | 1.95 |
| | 18 | 0.16 | 0.22 | 0.25 | 0.20 | 0.18 | 0.13 | 1.24 | 1.34 | 1.78 | 1.77 |
| | 19 | 0.03 | 0.05 | 0.10 | 0.14 | 0.05 | 0.08 | 0.83 | 1.37 | 1.01 | 1.57 |
| | All | 16.07 | 4.29 | 17.05 | 4.20 | 29.82 | 11.11 | 71.36 | 20.81 | 134.29 | 35.26 |
| 149 | 1 | 1.26 | 0.45 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.26 | 0.45 |
| | 2 | 0.88 | 0.20 | 0.00 | 0.00 | 0.68 | 1.45 | 1.60 | 3.33 | 3.16 | 4.75 |
| | 3 | 0.63 | 0.13 | 0.00 | 0.00 | 0.95 | 1.55 | 2.54 | 3.24 | 3.49 | 4.52 |
| | 4 | 0.92 | 0.26 | 0.09 | 0.18 | 1.64 | 1.40 | 0.00 | 0.00 | 2.65 | 1.59 |
| | 5 | 1.11 | 0.29 | 0.00 | 0.00 | 1.10 | 0.92 | 2.50 | 2.50 | 4.70 | 3.29 |
| | 6 | 1.28 | 0.36 | 0.07 | 0.17 | 1.75 | 0.92 | 4.44 | 2.51 | 7.54 | 3.22 |
| | 7 | 1.32 | 0.35 | 0.15 | 0.20 | 3.77 | 1.09 | 9.83 | 4.10 | 15.07 | 4.68 |
| | 8 | 1.48 | 0.38 | 0.15 | 0.17 | 3.24 | 1.72 | 0.00 | 0.00 | 4.87 | 1.96 |
| | 9 | 1.39 | 0.41 | 0.06 | 0.11 | 2.35 | 1.82 | 10.84 | 4.00 | 14.64 | 5.95 |
| | 10 | 1.38 | 0.31 | 0.10 | 0.16 | 1.22 | 1.10 | 7.50 | 2.73 | 10.20 | 3.81 |
| | 11 | 1.56 | 0.37 | 0.00 | 0.00 | 0.60 | 0.35 | 7.45 | 1.86 | 9.61 | 2.27 |
| | 12 | 1.50 | 0.33 | 0.00 | 0.00 | 0.54 | 0.35 | 7.18 | 1.63 | 9.09 | 1.94 |
| | 13 | 1.38 | 0.33 | 0.00 | 0.00 | 0.39 | 0.27 | 0.00 | 0.00 | 1.77 | 0.44 |
| | 14 | 1.15 | 0.23 | 0.00 | 0.00 | 0.46 | 0.30 | 6.84 | 1.85 | 8.45 | 2.04 |
| | 15 | 0.89 | 0.23 | 0.00 | 0.00 | 0.38 | 0.23 | 6.25 | 2.51 | 7.52 | 2.85 |
| | 16 | 0.65 | 0.24 | 0.02 | 0.06 | 0.29 | 0.32 | 4.91 | 2.67 | 5.81 | 2.94 |
| | 17 | 0.42 | 0.21 | 0.00 | 0.00 | 0.08 | 0.11 | 2.95 | 1.53 | 3.45 | 1.71 |
| | 18 | 0.20 | 0.16 | 0.00 | 0.00 | 0.06 | 0.16 | 1.90 | 1.62 | 2.16 | 1.78 |
| | 19 | 0.04 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.40 | 0.67 | 0.44 | 0.71 |
| | 20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.20 | 0.80 | 0.20 | 0.80 |
| | All | 19.44 | 4.70 | 0.65 | 0.50 | 19.29 | 6.62 | 76.68 | 9.45 | 116.06 | 18.64 |

TABLE 5. Aerial calcium accumulation means and standard deviations for each day after planting (DAP), node, and plant part. Values are in kg/ha, and planting date was 143 (23 May).

| | | ---Stems--- | | ---Leaves--- | | --Petioles-- | | ----Pods---- | | ---Totals--- | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DAP | Node | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev |
| 44 | 1 | 0.358 | 0.152 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.358 | 0.152 |
| | 2 | 0.218 | 0.061 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.218 | 0.061 |
| | 3 | 0.171 | 0.046 | 0.130 | 0.096 | 0.091 | 0.122 | 0.000 | 0.000 | 0.392 | 0.225 |
| | 4 | 0.245 | 0.081 | 0.975 | 0.277 | 0.270 | 0.085 | 0.000 | 0.000 | 1.491 | 0.398 |
| | 5 | 0.264 | 0.075 | 1.071 | 0.394 | 0.321 | 0.085 | 0.000 | 0.000 | 1.656 | 0.499 |
| | 6 | 0.238 | 0.062 | 0.884 | 0.320 | 0.235 | 0.084 | 0.000 | 0.000 | 1.357 | 0.451 |
| | 7 | 0.157 | 0.075 | 0.433 | 0.230 | 0.129 | 0.072 | 0.000 | 0.000 | 0.719 | 0.329 |
| | 8 | 0.069 | 0.104 | 0.125 | 0.172 | 0.031 | 0.045 | 0.000 | 0.000 | 0.224 | 0.288 |
| | 9 | 0.000 | 0.000 | 0.011 | 0.030 | 0.000 | 0.000 | 0.000 | 0.000 | 0.011 | 0.030 |
| | All | 1.719 | 0.522 | 3.629 | 1.057 | 1.077 | 0.310 | 0.000 | 0.000 | 6.426 | 1.825 |
| 57 | 1 | 0.376 | 0.101 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.376 | 0.101 |
| | 2 | 0.280 | 0.069 | 0.033 | 0.085 | 0.020 | 0.050 | 0.000 | 0.000 | 0.333 | 0.142 |
| | 3 | 0.234 | 0.105 | 0.161 | 0.111 | 0.101 | 0.080 | 0.000 | 0.000 | 0.496 | 0.231 |
| | 4 | 0.289 | 0.069 | 0.292 | 0.183 | 0.145 | 0.089 | 0.000 | 0.000 | 0.726 | 0.249 |
| | 5 | 0.305 | 0.065 | 1.136 | 0.358 | 0.424 | 0.092 | 0.000 | 0.000 | 1.865 | 0.452 |
| | 6 | 0.304 | 0.110 | 1.476 | 0.377 | 0.483 | 0.100 | 0.000 | 0.000 | 2.263 | 0.536 |
| | 7 | 0.333 | 0.080 | 1.591 | 0.403 | 0.565 | 0.201 | 0.000 | 0.000 | 2.489 | 0.611 |
| | 8 | 0.314 | 0.075 | 1.361 | 0.363 | 0.473 | 0.150 | 0.000 | 0.000 | 2.148 | 0.574 |
| | 9 | 0.254 | 0.081 | 0.876 | 0.368 | 0.308 | 0.134 | 0.000 | 0.000 | 1.438 | 0.569 |
| | 10 | 0.139 | 0.085 | 0.448 | 0.220 | 0.136 | 0.108 | 0.000 | 0.000 | 0.668 | 0.438 |
| | 11 | 0.049 | 0.051 | 0.089 | 0.123 | 0.033 | 0.051 | 0.000 | 0.000 | 0.152 | 0.194 |
| | 12 | 0.008 | 0.019 | 0.008 | 0.021 | 0.000 | 0.000 | 0.000 | 0.000 | 0.016 | 0.039 |
| | All | 2.865 | 0.688 | 7.416 | 1.685 | 2.688 | 0.802 | 0.000 | 0.000 | 13.030 | 3.167 |
| 70 | 1 | 0.461 | 0.184 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.461 | 0.184 |
| | 2 | 0.425 | 0.129 | 0.314 | 0.522 | 0.317 | 0.530 | 0.000 | 0.000 | 0.898 | 1.011 |
| | 3 | 0.291 | 0.148 | 0.399 | 0.469 | 0.408 | 0.472 | 0.000 | 0.000 | 1.097 | 1.003 |
| | 4 | 0.382 | 0.104 | 0.285 | 0.276 | 0.318 | 0.306 | 0.000 | 0.000 | 0.985 | 0.621 |
| | 5 | 0.439 | 0.107 | 0.257 | 0.225 | 0.360 | 0.250 | 0.000 | 0.000 | 1.011 | 0.482 |
| | 6 | 0.460 | 0.128 | 0.205 | 0.256 | 0.247 | 0.199 | 0.000 | 0.000 | 0.912 | 0.462 |
| | 7 | 0.411 | 0.107 | 0.452 | 0.378 | 0.552 | 0.313 | 0.000 | 0.000 | 1.415 | 0.647 |
| | 8 | 0.429 | 0.101 | 1.671 | 0.787 | 1.032 | 0.274 | 0.000 | 0.000 | 3.133 | 1.067 |
| | 9 | 0.390 | 0.156 | 1.771 | 0.861 | 0.884 | 0.151 | 0.000 | 0.000 | 3.045 | 1.069 |
| | 10 | 0.387 | 0.086 | 1.665 | 0.558 | 0.828 | 0.202 | 0.000 | 0.000 | 2.881 | 0.804 |
| | 11 | 0.388 | 0.108 | 1.612 | 0.342 | 0.811 | 0.172 | 0.000 | 0.000 | 2.811 | 0.565 |
| | 12 | 0.315 | 0.099 | 1.354 | 0.438 | 0.625 | 0.193 | 0.000 | 0.000 | 2.295 | 0.709 |
| | 13 | 0.264 | 0.081 | 0.839 | 0.420 | 0.388 | 0.152 | 0.000 | 0.000 | 1.492 | 0.640 |
| | 14 | 0.163 | 0.085 | 0.485 | 0.293 | 0.190 | 0.115 | 0.000 | 0.000 | 0.808 | 0.503 |
| | 15 | 0.032 | 0.049 | 0.080 | 0.125 | 0.037 | 0.058 | 0.000 | 0.000 | 0.148 | 0.232 |
| | 16 | 0.000 | 0.000 | 0.006 | 0.024 | 0.000 | 0.000 | 0.000 | 0.000 | 0.006 | 0.024 |
| | All | 5.237 | 1.347 | 11.286 | 3.091 | 6.873 | 1.547 | 0.000 | 0.000 | 23.396 | 5.802 |
| 79 | 1 | 0.751 | 0.168 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.751 | 0.168 |
| | 2 | 0.487 | 0.089 | 0.138 | 0.355 | 0.112 | 0.286 | 0.000 | 0.000 | 0.737 | 0.633 |
| | 3 | 0.378 | 0.064 | 0.435 | 0.644 | 0.529 | 0.770 | 0.000 | 0.000 | 1.343 | 1.430 |
| | 4 | 0.512 | 0.111 | 0.480 | 0.661 | 0.653 | 0.834 | 0.000 | 0.000 | 1.645 | 1.519 |
| | 5 | 0.554 | 0.125 | 0.259 | 0.258 | 0.366 | 0.366 | 0.000 | 0.000 | 1.179 | 0.665 |
| | 6 | 0.610 | 0.141 | 0.218 | 0.163 | 0.308 | 0.227 | 0.000 | 0.000 | 1.136 | 0.406 |
| | 7 | 0.563 | 0.116 | 0.685 | 0.346 | 0.899 | 0.371 | 0.000 | 0.000 | 2.148 | 0.753 |
| | 8 | 0.593 | 0.096 | 0.981 | 0.799 | 0.929 | 0.587 | 0.000 | 0.000 | 2.503 | 1.403 |
| | 9 | 0.559 | 0.095 | 1.683 | 0.785 | 1.010 | 0.353 | 0.000 | 0.000 | 3.252 | 1.138 |
| | 10 | 0.456 | 0.107 | 2.171 | 0.403 | 1.096 | 0.249 | 0.000 | 0.000 | 3.723 | 0.703 |
| | 11 | 0.428 | 0.054 | 2.065 | 0.374 | 1.069 | 0.211 | 0.000 | 0.000 | 3.561 | 0.607 |
| | 12 | 0.405 | 0.070 | 1.937 | 0.394 | 0.997 | 0.252 | 0.000 | 0.000 | 3.339 | 0.685 |
| | 13 | 0.429 | 0.093 | 1.599 | 0.393 | 0.846 | 0.303 | 0.000 | 0.000 | 2.873 | 0.751 |
| | 14 | 0.344 | 0.144 | 1.191 | 0.463 | 0.549 | 0.261 | 0.000 | 0.000 | 2.084 | 0.856 |
| | 15 | 0.247 | 0.138 | 0.735 | 0.400 | 0.323 | 0.234 | 0.000 | 0.000 | 1.259 | 0.787 |
| | 16 | 0.156 | 0.123 | 0.425 | 0.359 | 0.151 | 0.139 | 0.000 | 0.000 | 0.640 | 0.616 |
| | 17 | 0.049 | 0.079 | 0.108 | 0.162 | 0.042 | 0.076 | 0.000 | 0.000 | 0.198 | 0.313 |
| | 18 | 0.000 | 0.000 | 0.011 | 0.045 | 0.000 | 0.000 | 0.000 | 0.000 | 0.011 | 0.045 |
| | All | 7.502 | 1.332 | 15.022 | 4.170 | 9.860 | 3.336 | 0.000 | 0.000 | 32.383 | 8.538 |

(cont'd)

TABLE 5. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 90 | 1 | 0.617 | 0.148 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.579 | 0.210 |
| | 2 | 0.596 | 0.116 | 0.517 | 0.635 | 0.509 | 0.547 | 0.019 | 0.028 | 1.474 | 1.204 |
| | 3 | 0.463 | 0.094 | 1.366 | 1.047 | 1.655 | 1.041 | 0.067 | 0.073 | 3.161 | 2.302 |
| | 4 | 0.443 | 0.105 | 1.376 | 1.262 | 1.331 | 1.121 | 0.051 | 0.045 | 2.831 | 2.441 |
| | 5 | 0.467 | 0.122 | 0.729 | 0.579 | 0.869 | 0.805 | 0.033 | 0.031 | 1.767 | 1.486 |
| | 6 | 0.487 | 0.072 | 0.401 | 0.258 | 0.522 | 0.280 | 0.033 | 0.016 | 1.353 | 0.639 |
| | 7 | 0.573 | 0.115 | 0.752 | 0.293 | 1.076 | 0.369 | 0.061 | 0.023 | 2.308 | 0.898 |
| | 8 | 0.621 | 0.101 | 0.750 | 0.432 | 1.076 | 0.573 | 0.074 | 0.025 | 2.363 | 1.167 |
| | 9 | 0.601 | 0.078 | 0.633 | 0.322 | 0.822 | 0.286 | 0.064 | 0.025 | 1.988 | 0.757 |
| | 10 | 0.644 | 0.100 | 1.032 | 0.643 | 0.761 | 0.371 | 0.053 | 0.014 | 2.334 | 1.121 |
| | 11 | 0.717 | 0.105 | 1.946 | 0.389 | 0.998 | 0.215 | 0.055 | 0.016 | 3.483 | 1.096 |
| | 12 | 0.700 | 0.114 | 2.189 | 0.462 | 1.062 | 0.187 | 0.063 | 0.022 | 3.763 | 1.225 |
| | 13 | 0.613 | 0.105 | 1.807 | 0.422 | 0.938 | 0.208 | 0.062 | 0.021 | 3.206 | 1.081 |
| | 14 | 0.549 | 0.111 | 1.521 | 0.536 | 0.777 | 0.283 | 0.071 | 0.028 | 2.735 | 1.137 |
| | 15 | 0.450 | 0.127 | 1.135 | 0.417 | 0.627 | 0.257 | 0.071 | 0.025 | 2.140 | 0.951 |
| | 16 | 0.272 | 0.142 | 0.744 | 0.444 | 0.436 | 0.235 | 0.051 | 0.021 | 1.409 | 0.871 |
| | 17 | 0.240 | 0.258 | 0.557 | 0.381 | 0.279 | 0.195 | 0.029 | 0.023 | 1.037 | 0.781 |
| | 18 | 0.077 | 0.064 | 0.248 | 0.200 | 0.128 | 0.092 | 0.018 | 0.017 | 0.441 | 0.355 |
| | 19 | 0.013 | 0.019 | 0.063 | 0.093 | 0.026 | 0.041 | 0.000 | 0.000 | 0.095 | 0.148 |
| | 20 | 0.000 | 0.000 | 0.014 | 0.037 | 0.000 | 0.000 | 0.000 | 0.000 | 0.013 | 0.036 |
| | All | 9.143 | 1.409 | 17.430 | 4.634 | 13.576 | 4.212 | 0.875 | 0.235 | 38.461 | 13.992 |
| 100 | 1 | 0.664 | 0.182 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.664 | 0.182 |
| | 2 | 0.643 | 0.160 | 0.179 | 0.326 | 0.217 | 0.443 | 0.029 | 0.058 | 1.068 | 0.834 |
| | 3 | 0.487 | 0.115 | 0.740 | 0.811 | 0.820 | 0.828 | 0.083 | 0.109 | 2.130 | 1.686 |
| | 4 | 0.587 | 0.150 | 1.484 | 1.070 | 1.368 | 0.875 | 0.151 | 0.118 | 3.590 | 2.040 |
| | 5 | 0.613 | 0.187 | 0.490 | 0.618 | 0.518 | 0.634 | 0.078 | 0.098 | 1.700 | 1.325 |
| | 6 | 0.670 | 0.204 | 0.902 | 0.702 | 0.850 | 0.618 | 0.123 | 0.081 | 2.545 | 1.400 |
| | 7 | 0.601 | 0.160 | 1.224 | 0.569 | 1.284 | 0.582 | 0.179 | 0.102 | 3.289 | 1.260 |
| | 8 | 0.622 | 0.157 | 1.258 | 0.619 | 1.434 | 0.781 | 0.278 | 0.121 | 3.592 | 1.518 |
| | 9 | 0.588 | 0.145 | 1.127 | 0.432 | 1.280 | 0.648 | 0.247 | 0.094 | 3.243 | 1.172 |
| | 10 | 0.715 | 0.181 | 1.455 | 0.450 | 1.233 | 0.378 | 0.207 | 0.088 | 3.610 | 0.746 |
| | 11 | 0.746 | 0.182 | 2.831 | 0.886 | 1.333 | 0.323 | 0.176 | 0.055 | 5.086 | 1.179 |
| | 12 | 0.689 | 0.178 | 3.145 | 0.654 | 1.424 | 0.374 | 0.233 | 0.113 | 5.491 | 1.185 |
| | 13 | 0.640 | 0.150 | 3.032 | 0.761 | 1.343 | 0.387 | 0.245 | 0.099 | 5.261 | 1.238 |
| | 14 | 0.529 | 0.150 | 2.699 | 0.762 | 1.145 | 0.358 | 0.317 | 0.105 | 4.691 | 1.260 |
| | 15 | 0.424 | 0.124 | 2.063 | 0.728 | 0.888 | 0.362 | 0.285 | 0.116 | 3.660 | 1.209 |
| | 16 | 0.320 | 0.158 | 1.550 | 0.730 | 0.652 | 0.330 | 0.249 | 0.114 | 2.771 | 1.212 |
| | 17 | 0.228 | 0.118 | 1.132 | 0.472 | 0.466 | 0.269 | 0.168 | 0.099 | 1.993 | 0.892 |
| | 18 | 0.127 | 0.091 | 0.690 | 0.486 | 0.307 | 0.273 | 0.121 | 0.103 | 1.244 | 0.875 |
| | 19 | 0.041 | 0.061 | 0.273 | 0.355 | 0.107 | 0.139 | 0.045 | 0.070 | 0.466 | 0.582 |
| | 20 | 0.000 | 0.000 | 0.072 | 0.137 | 0.022 | 0.048 | 0.015 | 0.031 | 0.109 | 0.206 |
| | All | 9.933 | 2.419 | 26.346 | 5.490 | 16.692 | 5.418 | 3.231 | 0.869 | 56.201 | 12.926 |
| 113 | 1 | 0.815 | 0.327 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.815 | 0.327 |
| | 2 | 0.630 | 0.114 | 0.341 | 0.467 | 0.408 | 0.551 | 0.176 | 0.259 | 1.325 | 1.225 |
| | 3 | 0.482 | 0.105 | 0.418 | 0.660 | 0.498 | 0.699 | 0.162 | 0.268 | 1.561 | 1.650 |
| | 4 | 0.632 | 0.126 | 1.041 | 1.441 | 1.296 | 1.892 | 0.422 | 0.629 | 3.389 | 3.940 |
| | 5 | 0.768 | 0.167 | 0.696 | 0.703 | 0.869 | 0.927 | 0.450 | 0.421 | 2.783 | 2.101 |
| | 6 | 0.764 | 0.188 | 0.951 | 0.870 | 1.209 | 1.041 | 0.595 | 0.510 | 3.519 | 2.511 |
| | 7 | 0.722 | 0.145 | 1.350 | 0.637 | 1.436 | 0.619 | 0.761 | 0.378 | 4.269 | 1.605 |
| | 8 | 0.747 | 0.137 | 1.065 | 0.328 | 1.205 | 0.418 | 0.770 | 0.297 | 3.788 | 0.971 |
| | 9 | 0.682 | 0.129 | 0.749 | 0.486 | 0.805 | 0.493 | 0.568 | 0.297 | 2.803 | 1.299 |
| | 10 | 0.768 | 0.142 | 1.179 | 0.627 | 0.869 | 0.335 | 0.464 | 0.166 | 3.280 | 0.970 |
| | 11 | 0.745 | 0.167 | 2.765 | 0.916 | 1.453 | 0.369 | 0.490 | 0.156 | 5.453 | 1.355 |
| | 12 | 0.709 | 0.128 | 3.340 | 0.458 | 1.515 | 0.265 | 0.593 | 0.157 | 6.158 | 0.785 |
| | 13 | 0.614 | 0.117 | 2.943 | 0.596 | 1.346 | 0.286 | 0.629 | 0.242 | 5.533 | 1.071 |
| | 14 | 0.515 | 0.125 | 2.567 | 0.593 | 1.214 | 0.361 | 0.748 | 0.224 | 5.045 | 1.095 |
| | 15 | 0.412 | 0.114 | 1.777 | 0.573 | 0.895 | 0.343 | 0.718 | 0.245 | 3.803 | 1.093 |
| | 16 | 0.311 | 0.123 | 1.518 | 0.496 | 0.680 | 0.278 | 0.470 | 0.256 | 2.979 | 0.949 |
| | 17 | 0.205 | 0.109 | 1.129 | 0.454 | 0.500 | 0.284 | 0.358 | 0.162 | 2.192 | 0.939 |
| | 18 | 0.069 | 0.094 | 0.501 | 0.604 | 0.221 | 0.293 | 0.190 | 0.236 | 0.980 | 1.160 |
| | 19 | 0.025 | 0.062 | 0.073 | 0.146 | 0.028 | 0.055 | 0.032 | 0.098 | 0.158 | 0.296 |
| | All | 10.618 | 1.985 | 24.317 | 4.158 | 16.344 | 4.839 | 8.552 | 2.774 | 59.831 | 12.697 |

TABLE 5. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 127 | 1 | 0.651 | 0.250 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.651 | 0.250 |
| | 2 | 0.597 | 0.162 | 0.347 | 0.765 | 0.485 | 0.920 | 0.226 | 0.571 | 1.655 | 2.204 |
| | 3 | 0.461 | 0.119 | 0.801 | 0.853 | 0.878 | 0.885 | 0.545 | 0.572 | 2.684 | 2.333 |
| | 4 | 0.600 | 0.196 | 1.646 | 1.328 | 1.713 | 1.410 | 0.000 | 0.000 | 3.959 | 2.880 |
| | 5 | 0.677 | 0.189 | 0.506 | 0.970 | 0.602 | 1.172 | 0.379 | 0.458 | 2.164 | 2.650 |
| | 6 | 0.739 | 0.229 | 0.884 | 0.654 | 1.021 | 0.853 | 0.841 | 0.501 | 3.535 | 2.037 |
| | 7 | 0.679 | 0.170 | 1.519 | 0.757 | 1.676 | 0.761 | 1.313 | 0.518 | 4.637 | 2.021 |
| | 8 | 0.768 | 0.226 | 1.654 | 0.740 | 1.907 | 0.894 | 0.000 | 0.000 | 4.309 | 1.747 |
| | 9 | 0.688 | 0.216 | 1.237 | 0.609 | 1.370 | 0.846 | 1.383 | 0.688 | 4.678 | 2.187 |
| | 10 | 0.703 | 0.201 | 1.053 | 0.395 | 0.952 | 0.480 | 1.070 | 0.420 | 3.777 | 1.303 |
| | 11 | 0.702 | 0.232 | 1.632 | 0.806 | 0.968 | 0.452 | 0.786 | 0.336 | 4.089 | 1.612 |
| | 12 | 0.675 | 0.259 | 2.763 | 1.068 | 1.337 | 0.534 | 0.843 | 0.400 | 5.619 | 2.067 |
| | 13 | 0.558 | 0.237 | 2.839 | 1.029 | 1.281 | 0.493 | 0.000 | 0.000 | 4.573 | 1.728 |
| | 14 | 0.483 | 0.213 | 2.577 | 1.005 | 1.088 | 0.463 | 0.893 | 0.356 | 5.041 | 1.900 |
| | 15 | 0.385 | 0.177 | 2.008 | 0.910 | 0.930 | 0.440 | 0.844 | 0.440 | 4.167 | 1.844 |
| | 16 | 0.295 | 0.148 | 1.895 | 0.857 | 0.781 | 0.384 | 0.793 | 0.436 | 3.764 | 1.616 |
| | 17 | 0.209 | 0.132 | 1.333 | 0.718 | 0.546 | 0.354 | 0.566 | 0.364 | 2.787 | 1.425 |
| | 18 | 0.120 | 0.102 | 0.903 | 0.670 | 0.313 | 0.262 | 0.373 | 0.290 | 1.708 | 1.275 |
| | 19 | 0.035 | 0.049 | 0.253 | 0.422 | 0.094 | 0.138 | 0.270 | 0.235 | 0.517 | 0.754 |
| | 20 | 0.000 | 0.000 | 0.052 | 0.116 | 0.000 | 0.000 | 0.038 | 0.075 | 0.061 | 0.166 |
| | All | 9.914 | 3.210 | 25.853 | 7.843 | 17.943 | 7.275 | 11.001 | 3.115 | 65.956 | 21.846 |
| 139 | 1 | 0.530 | 0.119 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.530 | 0.119 |
| | 2 | 0.366 | 0.083 | 0.140 | 0.265 | 0.209 | 0.354 | 0.145 | 0.234 | 0.860 | 0.856 |
| | 3 | 0.281 | 0.074 | 0.841 | 1.155 | 0.998 | 1.322 | 0.683 | 1.080 | 2.803 | 3.544 |
| | 4 | 0.352 | 0.088 | 0.685 | 0.681 | 0.957 | 0.799 | 0.564 | 0.442 | 2.558 | 1.839 |
| | 5 | 0.388 | 0.109 | 0.312 | 0.412 | 0.436 | 0.403 | 0.351 | 0.302 | 1.487 | 1.037 |
| | 6 | 0.420 | 0.088 | 0.624 | 0.615 | 0.735 | 0.782 | 0.664 | 0.578 | 2.305 | 1.845 |
| | 7 | 0.400 | 0.092 | 1.073 | 0.503 | 1.289 | 0.693 | 1.125 | 0.501 | 3.886 | 1.655 |
| | 8 | 0.425 | 0.096 | 1.003 | 0.476 | 1.148 | 0.520 | 1.191 | 0.372 | 3.768 | 1.242 |
| | 9 | 0.396 | 0.078 | 0.889 | 0.587 | 0.918 | 0.607 | 1.212 | 0.465 | 3.414 | 1.581 |
| | 10 | 0.427 | 0.098 | 0.515 | 0.371 | 0.584 | 0.362 | 0.772 | 0.341 | 2.298 | 0.844 |
| | 11 | 0.433 | 0.073 | 0.990 | 0.660 | 0.635 | 0.319 | 0.651 | 0.213 | 2.709 | 0.983 |
| | 12 | 0.398 | 0.085 | 2.026 | 0.988 | 1.053 | 0.279 | 0.768 | 0.262 | 4.245 | 1.222 |
| | 13 | 0.341 | 0.087 | 2.568 | 0.591 | 1.138 | 0.312 | 0.870 | 0.296 | 4.917 | 1.004 |
| | 14 | 0.305 | 0.111 | 2.488 | 0.550 | 0.997 | 0.250 | 0.894 | 0.349 | 4.684 | 0.742 |
| | 15 | 0.242 | 0.101 | 1.787 | 0.518 | 0.781 | 0.292 | 0.908 | 0.294 | 3.718 | 0.770 |
| | 16 | 0.163 | 0.088 | 1.486 | 0.672 | 0.643 | 0.408 | 0.849 | 0.419 | 3.141 | 1.285 |
| | 17 | 0.121 | 0.093 | 1.169 | 0.511 | 0.464 | 0.312 | 0.655 | 0.401 | 2.408 | 0.998 |
| | 18 | 0.078 | 0.105 | 0.677 | 0.547 | 0.216 | 0.210 | 0.329 | 0.317 | 1.300 | 1.058 |
| | 19 | 0.023 | 0.037 | 0.354 | 0.492 | 0.113 | 0.172 | 0.206 | 0.318 | 0.683 | 0.962 |
| | All | 6.078 | 1.498 | 19.625 | 4.123 | 13.174 | 4.129 | 12.837 | 3.181 | 51.715 | 9.755 |
| 149 | 1 | 0.710 | 0.239 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.710 | 0.239 |
| | 2 | 0.507 | 0.093 | 0.000 | 0.000 | 0.180 | 0.336 | 0.269 | 0.442 | 0.936 | 0.778 |
| | 3 | 0.340 | 0.054 | 0.009 | 0.021 | 0.320 | 0.482 | 0.465 | 0.579 | 1.019 | 1.023 |
| | 4 | 0.478 | 0.107 | 0.040 | 0.078 | 0.556 | 0.506 | 0.000 | 0.000 | 1.074 | 0.592 |
| | 5 | 0.536 | 0.118 | 0.023 | 0.042 | 0.282 | 0.234 | 0.448 | 0.440 | 1.289 | 0.646 |
| | 6 | 0.574 | 0.125 | 0.047 | 0.107 | 0.496 | 0.318 | 0.729 | 0.420 | 1.846 | 0.661 |
| | 7 | 0.543 | 0.116 | 0.078 | 0.108 | 0.923 | 0.219 | 1.747 | 0.932 | 3.291 | 1.122 |
| | 8 | 0.593 | 0.121 | 0.055 | 0.062 | 0.758 | 0.352 | 0.000 | 0.000 | 1.407 | 0.436 |
| | 9 | 0.531 | 0.132 | 0.039 | 0.073 | 0.565 | 0.367 | 1.674 | 0.488 | 2.809 | 0.915 |
| | 10 | 0.549 | 0.117 | 0.050 | 0.083 | 0.305 | 0.213 | 1.250 | 0.482 | 2.153 | 0.730 |
| | 11 | 0.584 | 0.123 | 0.050 | 0.072 | 0.178 | 0.080 | 1.105 | 0.230 | 1.916 | 0.352 |
| | 12 | 0.529 | 0.118 | 0.049 | 0.081 | 0.178 | 0.160 | 1.189 | 0.300 | 1.945 | 0.440 |
| | 13 | 0.462 | 0.110 | 0.022 | 0.050 | 0.204 | 0.148 | 0.000 | 0.000 | 0.687 | 0.197 |
| | 14 | 0.405 | 0.094 | 0.019 | 0.062 | 0.344 | 0.213 | 1.206 | 0.303 | 1.975 | 0.472 |
| | 15 | 0.321 | 0.099 | 0.000 | 0.000 | 0.323 | 0.212 | 1.123 | 0.396 | 1.767 | 0.630 |
| | 16 | 0.260 | 0.118 | 0.034 | 0.088 | 0.227 | 0.305 | 0.992 | 0.576 | 1.512 | 0.872 |
| | 17 | 0.181 | 0.107 | 0.000 | 0.000 | 0.090 | 0.122 | 0.589 | 0.305 | 0.860 | 0.434 |
| | 18 | 0.114 | 0.093 | 0.000 | 0.000 | 0.080 | 0.214 | 0.378 | 0.324 | 0.572 | 0.501 |
| | 19 | 0.024 | 0.035 | 0.000 | 0.000 | 0.000 | 0.000 | 0.082 | 0.137 | 0.105 | 0.163 |
| | 20 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.019 | 0.075 | 0.019 | 0.075 |
| | All | 8.241 | 1.861 | 0.514 | 0.384 | 6.011 | 1.987 | 13.127 | 1.531 | 27.893 | 4.380 |

TABLE 6. Aerial magnesium accumulation means and standard deviations for each day after planting (DAP), node, and plant part. Values are in kg/ha, and planting date was 143 (23 May).

| | | ---Stems--- | | ---Leaves--- | | --Petioles-- | | ----Pods---- | | ---Totals--- | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DAP | Node | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev |
| 44 | 1 | 0.136 | 0.056 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.136 | 0.056 |
| | 2 | 0.096 | 0.026 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.096 | 0.026 |
| | 3 | 0.089 | 0.025 | 0.070 | 0.053 | 0.041 | 0.057 | 0.000 | 0.000 | 0.200 | 0.111 |
| | 4 | 0.145 | 0.047 | 0.477 | 0.137 | 0.113 | 0.039 | 0.000 | 0.000 | 0.735 | 0.196 |
| | 5 | 0.161 | 0.053 | 0.555 | 0.208 | 0.140 | 0.044 | 0.000 | 0.000 | 0.855 | 0.275 |
| | 6 | 0.148 | 0.041 | 0.523 | 0.182 | 0.107 | 0.044 | 0.000 | 0.000 | 0.778 | 0.259 |
| | 7 | 0.095 | 0.047 | 0.280 | 0.138 | 0.061 | 0.035 | 0.000 | 0.000 | 0.436 | 0.187 |
| | 8 | 0.041 | 0.063 | 0.085 | 0.118 | 0.015 | 0.022 | 0.000 | 0.000 | 0.142 | 0.183 |
| | 9 | 0.000 | 0.000 | 0.007 | 0.021 | 0.000 | 0.000 | 0.000 | 0.000 | 0.007 | 0.021 |
| | All | 0.911 | 0.285 | 1.997 | 0.581 | 0.477 | 0.161 | 0.000 | 0.000 | 3.386 | 0.987 |
| 57 | 1 | 0.128 | 0.035 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.128 | 0.035 |
| | 2 | 0.112 | 0.023 | 0.023 | 0.058 | 0.015 | 0.037 | 0.000 | 0.000 | 0.149 | 0.099 |
| | 3 | 0.096 | 0.019 | 0.104 | 0.079 | 0.072 | 0.058 | 0.000 | 0.000 | 0.271 | 0.152 |
| | 4 | 0.147 | 0.029 | 0.166 | 0.106 | 0.089 | 0.058 | 0.000 | 0.000 | 0.402 | 0.165 |
| | 5 | 0.183 | 0.037 | 0.550 | 0.153 | 0.212 | 0.053 | 0.000 | 0.000 | 0.945 | 0.212 |
| | 6 | 2.126 | 7.656 | 0.751 | 0.181 | 0.226 | 0.048 | 0.000 | 0.000 | 3.102 | 7.695 |
| | 7 | 0.219 | 0.052 | 0.814 | 0.181 | 0.255 | 0.107 | 0.000 | 0.000 | 1.289 | 0.328 |
| | 8 | 0.205 | 0.053 | 0.787 | 0.189 | 0.224 | 0.073 | 0.000 | 0.000 | 1.216 | 0.295 |
| | 9 | 0.174 | 0.053 | 0.593 | 0.219 | 0.149 | 0.063 | 0.000 | 0.000 | 0.916 | 0.307 |
| | 10 | 0.100 | 0.062 | 0.307 | 0.161 | 0.073 | 0.059 | 0.000 | 0.000 | 0.441 | 0.296 |
| | 11 | 0.035 | 0.037 | 0.065 | 0.090 | 0.018 | 0.028 | 0.000 | 0.000 | 0.105 | 0.133 |
| | 12 | 0.005 | 0.013 | 0.007 | 0.017 | 0.000 | 0.000 | 0.000 | 0.000 | 0.012 | 0.030 |
| | All | 3.518 | 7.726 | 4.127 | 0.983 | 1.333 | 0.454 | 0.000 | 0.000 | 9.011 | 7.955 |
| 70 | 1 | 0.150 | 0.055 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.150 | 0.055 |
| | 2 | 0.147 | 0.051 | 0.219 | 0.362 | 0.190 | 0.320 | 0.000 | 0.000 | 0.454 | 0.643 |
| | 3 | 0.112 | 0.061 | 0.266 | 0.308 | 0.235 | 0.272 | 0.000 | 0.000 | 0.613 | 0.605 |
| | 4 | 0.166 | 0.049 | 0.197 | 0.192 | 0.199 | 0.192 | 0.000 | 0.000 | 0.563 | 0.391 |
| | 5 | 0.207 | 0.055 | 0.213 | 0.186 | 0.218 | 0.154 | 0.000 | 0.000 | 0.610 | 0.339 |
| | 6 | 0.236 | 0.066 | 0.162 | 0.175 | 0.152 | 0.122 | 0.000 | 0.000 | 0.551 | 0.314 |
| | 7 | 0.246 | 0.062 | 0.313 | 0.211 | 0.300 | 0.150 | 0.000 | 0.000 | 0.859 | 0.355 |
| | 8 | 0.279 | 0.051 | 0.920 | 0.389 | 0.530 | 0.147 | 0.000 | 0.000 | 1.730 | 0.549 |
| | 9 | 0.271 | 0.095 | 0.850 | 0.257 | 0.443 | 0.085 | 0.000 | 0.000 | 1.564 | 0.351 |
| | 10 | 0.294 | 0.060 | 0.803 | 0.231 | 0.414 | 0.121 | 0.000 | 0.000 | 1.511 | 0.364 |
| | 11 | 0.292 | 0.076 | 0.858 | 0.206 | 0.433 | 0.108 | 0.000 | 0.000 | 1.583 | 0.345 |
| | 12 | 0.243 | 0.079 | 0.795 | 0.251 | 0.356 | 0.106 | 0.000 | 0.000 | 1.394 | 0.416 |
| | 13 | 0.192 | 0.061 | 0.569 | 0.262 | 0.224 | 0.092 | 0.000 | 0.000 | 0.985 | 0.406 |
| | 14 | 0.119 | 0.063 | 0.347 | 0.199 | 0.115 | 0.070 | 0.000 | 0.000 | 0.560 | 0.341 |
| | 15 | 0.022 | 0.034 | 0.063 | 0.098 | 0.021 | 0.032 | 0.000 | 0.000 | 0.105 | 0.164 |
| | 16 | 0.000 | 0.000 | 0.006 | 0.023 | 0.000 | 0.000 | 0.000 | 0.000 | 0.006 | 0.023 |
| | All | 2.976 | 0.695 | 6.505 | 1.546 | 3.755 | 0.798 | 0.000 | 0.000 | 13.237 | 2.917 |
| 79 | 1 | 0.254 | 0.056 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.254 | 0.056 |
| | 2 | 0.177 | 0.040 | 0.082 | 0.213 | 0.056 | 0.143 | 0.000 | 0.000 | 0.316 | 0.360 |
| | 3 | 0.149 | 0.031 | 0.264 | 0.373 | 0.297 | 0.435 | 0.000 | 0.000 | 0.711 | 0.815 |
| | 4 | 0.222 | 0.052 | 0.325 | 0.424 | 0.358 | 0.458 | 0.000 | 0.000 | 0.905 | 0.899 |
| | 5 | 0.256 | 0.065 | 0.213 | 0.205 | 0.212 | 0.210 | 0.000 | 0.000 | 0.681 | 0.437 |
| | 6 | 0.294 | 0.071 | 0.188 | 0.132 | 0.175 | 0.118 | 0.000 | 0.000 | 0.658 | 0.261 |
| | 7 | 0.308 | 0.070 | 0.540 | 0.195 | 0.489 | 0.178 | 0.000 | 0.000 | 1.336 | 0.400 |
| | 8 | 0.359 | 0.076 | 0.588 | 0.354 | 0.538 | 0.322 | 0.000 | 0.000 | 1.486 | 0.710 |
| | 9 | 0.393 | 0.079 | 0.790 | 0.302 | 0.561 | 0.195 | 0.000 | 0.000 | 1.744 | 0.525 |
| | 10 | 0.431 | 0.070 | 1.011 | 0.203 | 0.594 | 0.140 | 0.000 | 0.000 | 2.036 | 0.378 |
| | 11 | 0.454 | 0.079 | 1.011 | 0.181 | 0.594 | 0.129 | 0.000 | 0.000 | 2.059 | 0.367 |
| | 12 | 0.393 | 0.095 | 0.931 | 0.165 | 0.505 | 0.150 | 0.000 | 0.000 | 1.829 | 0.377 |
| | 13 | 0.308 | 0.096 | 0.793 | 0.178 | 0.403 | 0.151 | 0.000 | 0.000 | 1.503 | 0.396 |
| | 14 | 0.214 | 0.104 | 0.605 | 0.218 | 0.267 | 0.133 | 0.000 | 0.000 | 1.086 | 0.449 |
| | 15 | 0.143 | 0.076 | 0.416 | 0.202 | 0.147 | 0.108 | 0.000 | 0.000 | 0.680 | 0.399 |
| | 16 | 0.085 | 0.065 | 0.233 | 0.184 | 0.067 | 0.062 | 0.000 | 0.000 | 0.337 | 0.311 |
| | 17 | 0.025 | 0.040 | 0.062 | 0.092 | 0.017 | 0.031 | 0.000 | 0.000 | 0.104 | 0.160 |
| | 18 | 0.000 | 0.000 | 0.006 | 0.023 | 0.000 | 0.000 | 0.000 | 0.000 | 0.006 | 0.023 |
| | All | 4.454 | 0.930 | 8.002 | 1.981 | 5.272 | 1.786 | 0.000 | 0.000 | 17.729 | 4.538 |

TABLE 6. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 90 | 1 | 0.281 | 0.080 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.263 | 0.104 |
| | 2 | 0.268 | 0.055 | 0.255 | 0.303 | 0.279 | 0.301 | 0.009 | 0.013 | 0.729 | 0.620 |
| | 3 | 0.231 | 0.052 | 0.717 | 0.515 | 0.914 | 0.590 | 0.032 | 0.036 | 1.673 | 1.223 |
| | 4 | 0.311 | 0.076 | 0.727 | 0.665 | 0.735 | 0.672 | 0.024 | 0.021 | 1.593 | 1.384 |
| | 5 | 0.325 | 0.069 | 0.436 | 0.326 | 0.442 | 0.408 | 0.017 | 0.016 | 1.033 | 0.801 |
| | 6 | 0.354 | 0.053 | 0.286 | 0.183 | 0.250 | 0.137 | 0.018 | 0.009 | 0.853 | 0.380 |
| | 7 | 0.343 | 0.050 | 0.584 | 0.208 | 0.499 | 0.177 | 0.037 | 0.014 | 1.372 | 0.523 |
| | 8 | 0.377 | 0.044 | 0.582 | 0.298 | 0.451 | 0.244 | 0.045 | 0.014 | 1.364 | 0.639 |
| | 9 | 0.413 | 0.065 | 0.453 | 0.178 | 0.364 | 0.129 | 0.038 | 0.016 | 1.190 | 0.446 |
| | 10 | 0.485 | 0.079 | 0.546 | 0.272 | 0.365 | 0.174 | 0.029 | 0.008 | 1.336 | 0.588 |
| | 11 | 0.557 | 0.056 | 0.893 | 0.198 | 0.500 | 0.116 | 0.028 | 0.008 | 1.854 | 0.579 |
| | 12 | 0.532 | 0.108 | 0.990 | 0.214 | 0.518 | 0.117 | 0.031 | 0.010 | 1.942 | 0.643 |
| | 13 | 0.432 | 0.104 | 0.850 | 0.210 | 0.422 | 0.109 | 0.027 | 0.009 | 1.623 | 0.561 |
| | 14 | 0.331 | 0.100 | 0.721 | 0.246 | 0.319 | 0.130 | 0.029 | 0.011 | 1.312 | 0.560 |
| | 15 | 0.239 | 0.083 | 0.548 | 0.195 | 0.233 | 0.109 | 0.027 | 0.010 | 0.982 | 0.451 |
| | 16 | 0.147 | 0.085 | 0.359 | 0.218 | 0.149 | 0.086 | 0.018 | 0.008 | 0.632 | 0.408 |
| | 17 | 0.119 | 0.134 | 0.242 | 0.168 | 0.084 | 0.059 | 0.010 | 0.008 | 0.427 | 0.329 |
| | 18 | 0.034 | 0.031 | 0.101 | 0.081 | 0.035 | 0.027 | 0.006 | 0.006 | 0.165 | 0.137 |
| | 19 | 0.006 | 0.008 | 0.024 | 0.035 | 0.007 | 0.011 | 0.000 | 0.000 | 0.034 | 0.053 |
| | 20 | 0.000 | 0.000 | 0.005 | 0.014 | 0.000 | 0.000 | 0.000 | 0.000 | 0.005 | 0.016 |
| | All | 5.785 | 0.804 | 9.131 | 2.470 | 6.398 | 2.114 | 0.426 | 0.110 | 20.382 | 7.392 |
| 100 | 1 | 0.315 | 0.102 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.315 | 0.102 |
| | 2 | 0.323 | 0.077 | 0.086 | 0.156 | 0.121 | 0.246 | 0.014 | 0.028 | 0.544 | 0.434 |
| | 3 | 0.277 | 0.074 | 0.362 | 0.388 | 0.496 | 0.497 | 0.048 | 0.063 | 1.182 | 0.917 |
| | 4 | 0.388 | 0.090 | 0.736 | 0.516 | 0.859 | 0.555 | 0.082 | 0.063 | 2.066 | 1.144 |
| | 5 | 0.421 | 0.112 | 0.300 | 0.385 | 0.277 | 0.350 | 0.047 | 0.059 | 1.045 | 0.786 |
| | 6 | 0.469 | 0.131 | 0.581 | 0.438 | 0.430 | 0.329 | 0.072 | 0.047 | 1.552 | 0.840 |
| | 7 | 0.429 | 0.106 | 0.796 | 0.350 | 0.642 | 0.266 | 0.104 | 0.056 | 1.971 | 0.691 |
| | 8 | 0.501 | 0.129 | 0.823 | 0.381 | 0.683 | 0.360 | 0.167 | 0.068 | 2.175 | 0.835 |
| | 9 | 0.541 | 0.138 | 0.734 | 0.267 | 0.585 | 0.268 | 0.147 | 0.050 | 2.006 | 0.625 |
| | 10 | 0.641 | 0.171 | 0.753 | 0.217 | 0.597 | 0.164 | 0.127 | 0.051 | 2.119 | 0.431 |
| | 11 | 0.715 | 0.178 | 1.211 | 0.396 | 0.716 | 0.171 | 0.112 | 0.032 | 2.754 | 0.625 |
| | 12 | 0.654 | 0.170 | 1.256 | 0.274 | 0.774 | 0.188 | 0.141 | 0.066 | 2.824 | 0.586 |
| | 13 | 0.564 | 0.134 | 1.222 | 0.330 | 0.693 | 0.197 | 0.147 | 0.059 | 2.625 | 0.596 |
| | 14 | 0.416 | 0.128 | 1.072 | 0.315 | 0.548 | 0.159 | 0.178 | 0.061 | 2.215 | 0.572 |
| | 15 | 0.310 | 0.104 | 0.778 | 0.237 | 0.390 | 0.151 | 0.156 | 0.063 | 1.634 | 0.483 |
| | 16 | 0.208 | 0.116 | 0.553 | 0.229 | 0.263 | 0.130 | 0.132 | 0.062 | 1.156 | 0.471 |
| | 17 | 0.138 | 0.077 | 0.395 | 0.142 | 0.167 | 0.083 | 0.087 | 0.049 | 0.788 | 0.315 |
| | 18 | 0.069 | 0.051 | 0.234 | 0.142 | 0.100 | 0.077 | 0.058 | 0.050 | 0.461 | 0.280 |
| | 19 | 0.020 | 0.030 | 0.082 | 0.100 | 0.032 | 0.041 | 0.021 | 0.033 | 0.155 | 0.186 |
| | 20 | 0.000 | 0.000 | 0.020 | 0.039 | 0.005 | 0.012 | 0.007 | 0.013 | 0.032 | 0.060 |
| | All | 7.401 | 1.769 | 11.996 | 2.326 | 8.378 | 2.505 | 1.848 | 0.465 | 29.621 | 6.143 |
| 113 | 1 | 0.399 | 0.152 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.399 | 0.152 |
| | 2 | 0.309 | 0.057 | 0.177 | 0.238 | 0.246 | 0.331 | 0.103 | 0.152 | 0.704 | 0.673 |
| | 3 | 0.263 | 0.056 | 0.205 | 0.308 | 0.304 | 0.444 | 0.093 | 0.154 | 0.865 | 0.912 |
| | 4 | 0.376 | 0.086 | 0.395 | 0.536 | 0.671 | 1.000 | 0.265 | 0.394 | 1.707 | 1.934 |
| | 5 | 0.462 | 0.102 | 0.383 | 0.354 | 0.461 | 0.491 | 0.281 | 0.254 | 1.588 | 1.127 |
| | 6 | 0.493 | 0.127 | 0.489 | 0.374 | 0.587 | 0.481 | 0.365 | 0.302 | 1.934 | 1.216 |
| | 7 | 0.486 | 0.103 | 0.778 | 0.381 | 0.696 | 0.308 | 0.470 | 0.233 | 2.431 | 0.915 |
| | 8 | 0.554 | 0.104 | 0.613 | 0.157 | 0.562 | 0.171 | 0.492 | 0.186 | 2.200 | 0.455 |
| | 9 | 0.575 | 0.107 | 0.423 | 0.262 | 0.341 | 0.213 | 0.381 | 0.196 | 1.721 | 0.667 |
| | 10 | 0.722 | 0.138 | 0.544 | 0.288 | 0.411 | 0.161 | 0.327 | 0.118 | 2.004 | 0.514 |
| | 11 | 0.734 | 0.157 | 1.091 | 0.387 | 0.830 | 0.219 | 0.354 | 0.114 | 3.008 | 0.677 |
| | 12 | 0.692 | 0.144 | 1.254 | 0.235 | 0.843 | 0.138 | 0.423 | 0.110 | 3.212 | 0.417 |
| | 13 | 0.526 | 0.142 | 1.051 | 0.222 | 0.728 | 0.133 | 0.443 | 0.171 | 2.748 | 0.501 |
| | 14 | 0.371 | 0.107 | 0.886 | 0.189 | 0.617 | 0.159 | 0.539 | 0.166 | 2.414 | 0.443 |
| | 15 | 0.266 | 0.088 | 0.613 | 0.179 | 0.406 | 0.153 | 0.498 | 0.164 | 1.783 | 0.448 |
| | 16 | 0.187 | 0.086 | 0.490 | 0.141 | 0.283 | 0.113 | 0.331 | 0.187 | 1.291 | 0.391 |
| | 17 | 0.108 | 0.058 | 0.316 | 0.104 | 0.183 | 0.098 | 0.231 | 0.099 | 0.838 | 0.319 |
| | 18 | 0.031 | 0.043 | 0.138 | 0.140 | 0.069 | 0.086 | 0.127 | 0.154 | 0.366 | 0.387 |
| | 19 | 0.012 | 0.030 | 0.020 | 0.039 | 0.010 | 0.019 | 0.020 | 0.061 | 0.061 | 0.120 |
| | All | 7.569 | 1.423 | 9.823 | 1.564 | 8.166 | 2.181 | 5.717 | 1.744 | 31.275 | 5.626 |

(cont'd)

TABLE 6. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 127 | 1 | 0.225 | 0.083 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.225 | 0.083 |
| | 2 | 0.238 | 0.061 | 0.123 | 0.275 | 0.322 | 0.630 | 0.186 | 0.487 | 0.870 | 1.363 |
| | 3 | 0.207 | 0.052 | 0.298 | 0.321 | 0.526 | 0.539 | 0.424 | 0.458 | 1.456 | 1.315 |
| | 4 | 0.304 | 0.094 | 0.561 | 0.423 | 1.018 | 0.807 | 0.000 | 0.000 | 1.883 | 1.293 |
| | 5 | 0.377 | 0.103 | 0.199 | 0.348 | 0.338 | 0.633 | 0.312 | 0.382 | 1.227 | 1.383 |
| | 6 | 0.420 | 0.127 | 0.370 | 0.268 | 0.529 | 0.430 | 0.657 | 0.393 | 2.000 | 1.098 |
| | 7 | 0.417 | 0.106 | 0.580 | 0.268 | 0.890 | 0.396 | 1.011 | 0.404 | 2.649 | 1.080 |
| | 8 | 0.478 | 0.144 | 0.624 | 0.250 | 0.888 | 0.399 | 0.000 | 0.000 | 1.990 | 0.725 |
| | 9 | 0.501 | 0.157 | 0.488 | 0.233 | 0.620 | 0.385 | 1.133 | 0.569 | 2.742 | 1.253 |
| | 10 | 0.568 | 0.163 | 0.399 | 0.159 | 0.474 | 0.232 | 0.896 | 0.354 | 2.336 | 0.784 |
| | 11 | 0.632 | 0.210 | 0.573 | 0.269 | 0.556 | 0.258 | 0.701 | 0.300 | 2.461 | 0.894 |
| | 12 | 0.584 | 0.225 | 0.891 | 0.319 | 0.797 | 0.304 | 0.750 | 0.350 | 3.022 | 1.047 |
| | 13 | 0.442 | 0.188 | 0.914 | 0.330 | 0.752 | 0.276 | 0.000 | 0.000 | 2.026 | 0.746 |
| | 14 | 0.362 | 0.166 | 0.757 | 0.296 | 0.611 | 0.252 | 0.788 | 0.316 | 2.518 | 0.915 |
| | 15 | 0.249 | 0.116 | 0.574 | 0.255 | 0.487 | 0.225 | 0.733 | 0.386 | 2.043 | 0.893 |
| | 16 | 0.181 | 0.097 | 0.502 | 0.232 | 0.391 | 0.187 | 0.666 | 0.366 | 1.740 | 0.745 |
| | 17 | 0.117 | 0.075 | 0.357 | 0.188 | 0.242 | 0.153 | 0.472 | 0.306 | 1.258 | 0.652 |
| | 18 | 0.056 | 0.048 | 0.208 | 0.152 | 0.136 | 0.113 | 0.302 | 0.237 | 0.703 | 0.521 |
| | 19 | 0.016 | 0.023 | 0.055 | 0.095 | 0.042 | 0.062 | 0.200 | 0.174 | 0.214 | 0.303 |
| | 20 | 0.000 | 0.000 | 0.012 | 0.028 | 0.000 | 0.000 | 0.026 | 0.052 | 0.019 | 0.050 |
| | All | 6.293 | 2.020 | 8.431 | 2.342 | 9.618 | 3.592 | 9.139 | 2.578 | 34.197 | 10.587 |
| 139 | 1 | 0.182 | 0.037 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.182 | 0.037 |
| | 2 | 0.142 | 0.029 | 0.045 | 0.082 | 0.112 | 0.192 | 0.135 | 0.214 | 0.435 | 0.488 |
| | 3 | 0.126 | 0.030 | 0.241 | 0.321 | 0.572 | 0.756 | 0.672 | 1.075 | 1.611 | 2.146 |
| | 4 | 0.190 | 0.042 | 0.180 | 0.183 | 0.673 | 0.566 | 0.547 | 0.428 | 1.590 | 1.140 |
| | 5 | 0.204 | 0.052 | 0.101 | 0.105 | 0.226 | 0.213 | 0.361 | 0.333 | 0.893 | 0.593 |
| | 6 | 0.227 | 0.040 | 0.211 | 0.218 | 0.378 | 0.434 | 0.674 | 0.571 | 1.419 | 1.155 |
| | 7 | 0.215 | 0.043 | 0.345 | 0.176 | 0.586 | 0.315 | 1.163 | 0.538 | 2.309 | 0.981 |
| | 8 | 0.259 | 0.044 | 0.294 | 0.128 | 0.547 | 0.226 | 1.261 | 0.405 | 2.360 | 0.665 |
| | 9 | 0.284 | 0.049 | 0.258 | 0.150 | 0.417 | 0.242 | 1.398 | 0.596 | 2.356 | 0.920 |
| | 10 | 0.393 | 0.101 | 0.158 | 0.106 | 0.283 | 0.150 | 0.914 | 0.422 | 1.748 | 0.587 |
| | 11 | 0.390 | 0.067 | 0.302 | 0.212 | 0.416 | 0.219 | 0.795 | 0.274 | 1.904 | 0.536 |
| | 12 | 0.359 | 0.091 | 0.595 | 0.307 | 0.686 | 0.205 | 0.892 | 0.291 | 2.533 | 0.568 |
| | 13 | 0.272 | 0.086 | 0.713 | 0.218 | 0.706 | 0.164 | 0.989 | 0.327 | 2.680 | 0.592 |
| | 14 | 0.223 | 0.096 | 0.634 | 0.149 | 0.600 | 0.100 | 0.994 | 0.389 | 2.450 | 0.487 |
| | 15 | 0.166 | 0.081 | 0.451 | 0.145 | 0.447 | 0.153 | 0.967 | 0.308 | 2.030 | 0.491 |
| | 16 | 0.113 | 0.065 | 0.330 | 0.128 | 0.350 | 0.195 | 0.823 | 0.408 | 1.616 | 0.678 |
| | 17 | 0.083 | 0.059 | 0.263 | 0.108 | 0.243 | 0.143 | 0.569 | 0.330 | 1.159 | 0.509 |
| | 18 | 0.052 | 0.067 | 0.160 | 0.147 | 0.109 | 0.106 | 0.282 | 0.278 | 0.603 | 0.524 |
| | 19 | 0.016 | 0.025 | 0.076 | 0.102 | 0.059 | 0.089 | 0.180 | 0.285 | 0.322 | 0.465 |
| | All | 3.888 | 0.892 | 5.356 | 1.306 | 7.341 | 1.833 | 13.615 | 3.394 | 30.200 | 5.727 |
| 149 | 1 | 0.155 | 0.049 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.155 | 0.049 |
| | 2 | 0.115 | 0.022 | 0.000 | 0.000 | 0.104 | 0.202 | 0.261 | 0.486 | 0.480 | 0.684 |
| | 3 | 0.092 | 0.016 | 0.002 | 0.006 | 0.208 | 0.299 | 0.467 | 0.568 | 0.653 | 0.818 |
| | 4 | 0.149 | 0.033 | 0.012 | 0.023 | 0.370 | 0.328 | 0.000 | 0.000 | 0.531 | 0.354 |
| | 5 | 0.174 | 0.033 | 0.011 | 0.020 | 0.141 | 0.122 | 0.448 | 0.446 | 0.774 | 0.541 |
| | 6 | 0.200 | 0.044 | 0.010 | 0.022 | 0.224 | 0.161 | 0.734 | 0.421 | 1.167 | 0.503 |
| | 7 | 0.203 | 0.041 | 0.022 | 0.028 | 0.444 | 0.123 | 1.676 | 0.888 | 2.345 | 1.003 |
| | 8 | 0.241 | 0.056 | 0.019 | 0.021 | 0.321 | 0.135 | 0.000 | 0.000 | 0.581 | 0.155 |
| | 9 | 0.263 | 0.063 | 0.007 | 0.014 | 0.258 | 0.154 | 1.775 | 0.591 | 2.304 | 0.759 |
| | 10 | 0.349 | 0.077 | 0.015 | 0.026 | 0.167 | 0.111 | 1.346 | 0.529 | 1.877 | 0.667 |
| | 11 | 0.422 | 0.112 | 0.015 | 0.022 | 0.116 | 0.048 | 1.219 | 0.256 | 1.773 | 0.340 |
| | 12 | 0.402 | 0.122 | 0.014 | 0.024 | 0.116 | 0.105 | 1.282 | 0.327 | 1.814 | 0.403 |
| | 13 | 0.324 | 0.104 | 0.006 | 0.013 | 0.139 | 0.100 | 0.000 | 0.000 | 0.468 | 0.140 |
| | 14 | 0.261 | 0.086 | 0.005 | 0.017 | 0.219 | 0.129 | 1.226 | 0.317 | 1.712 | 0.416 |
| | 15 | 0.196 | 0.069 | 0.000 | 0.000 | 0.280 | 0.125 | 1.099 | 0.403 | 1.496 | 0.539 |
| | 16 | 0.164 | 0.077 | 0.006 | 0.017 | 0.136 | 0.182 | 0.924 | 0.525 | 1.231 | 0.678 |
| | 17 | 0.105 | 0.065 | 0.000 | 0.000 | 0.050 | 0.068 | 0.549 | 0.289 | 0.705 | 0.360 |
| | 18 | 0.065 | 0.052 | 0.000 | 0.000 | 0.032 | 0.084 | 0.337 | 0.291 | 0.434 | 0.356 |
| | 19 | 0.012 | 0.018 | 0.000 | 0.000 | 0.000 | 0.000 | 0.069 | 0.116 | 0.081 | 0.129 |
| | 20 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.024 | 0.097 | 0.024 | 0.097 |
| | All | 3.893 | 0.995 | 0.145 | 0.098 | 3.245 | 1.016 | 13.319 | 1.486 | 20.603 | 2.920 |

TABLE 7. Aerial manganese accumulation means and standard deviations for each day after planting (DAP), node, and plant part. Values are in g/ha, and planting date was 143 (23 May).

| | | ---Stems--- | | ---Leaves--- | | --Petioles-- | | ----Pods---- | | ---Totals--- | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DAP | Node | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev |
| 44 | 1 | 1.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.0 | 0.5 |
| | 2 | 0.6 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 0.2 |
| | 3 | 0.5 | 0.1 | 0.5 | 0.3 | 0.2 | 0.2 | 0.0 | 0.0 | 1.2 | 0.6 |
| | 4 | 0.7 | 0.2 | 4.0 | 1.2 | 0.4 | 0.1 | 0.0 | 0.0 | 5.0 | 1.4 |
| | 5 | 0.7 | 0.2 | 4.9 | 1.9 | 0.5 | 0.2 | 0.0 | 0.0 | 6.1 | 2.2 |
| | 6 | 0.5 | 0.2 | 4.8 | 1.8 | 0.4 | 0.2 | 0.0 | 0.0 | 5.7 | 2.2 |
| | 7 | 0.3 | 0.1 | 2.6 | 1.4 | 0.2 | 0.1 | 0.0 | 0.0 | 3.1 | 1.6 |
| | 8 | 0.1 | 0.2 | 0.8 | 1.2 | 0.1 | 0.1 | 0.0 | 0.0 | 1.0 | 1.4 |
| | 9 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| | All | 4.3 | 1.4 | 17.7 | 5.6 | 1.7 | 0.6 | 0.0 | 0.0 | 23.8 | 7.5 |
| 57 | 1 | 0.8 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8 | 0.2 |
| | 2 | 0.7 | 0.1 | 0.2 | 0.6 | 0.1 | 0.1 | 0.0 | 0.0 | 1.0 | 0.8 |
| | 3 | 0.5 | 0.1 | 1.4 | 1.0 | 0.3 | 0.2 | 0.0 | 0.0 | 2.2 | 1.3 |
| | 4 | 0.5 | 0.1 | 2.2 | 1.4 | 0.3 | 0.2 | 0.0 | 0.0 | 3.0 | 1.6 |
| | 5 | 0.6 | 0.1 | 6.7 | 2.2 | 0.7 | 0.1 | 0.0 | 0.0 | 8.1 | 2.2 |
| | 6 | 0.7 | 0.2 | 7.3 | 1.2 | 0.9 | 0.2 | 0.0 | 0.0 | 8.9 | 1.5 |
| | 7 | 0.7 | 0.1 | 7.9 | 1.5 | 1.0 | 0.2 | 0.0 | 0.0 | 9.5 | 1.8 |
| | 8 | 0.7 | 0.1 | 8.1 | 2.0 | 0.8 | 0.3 | 0.0 | 0.0 | 9.6 | 2.3 |
| | 9 | 0.7 | 0.2 | 5.4 | 2.0 | 0.8 | 0.4 | 0.0 | 0.0 | 6.8 | 2.6 |
| | 10 | 0.4 | 0.2 | 3.0 | 1.5 | 0.4 | 0.4 | 0.0 | 0.0 | 3.4 | 2.3 |
| | 11 | 0.1 | 0.1 | 0.7 | 0.9 | 0.1 | 0.2 | 0.0 | 0.0 | 0.8 | 1.1 |
| | 12 | 0.2 | 0.4 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.6 |
| | All | 6.4 | 1.4 | 42.5 | 8.8 | 5.4 | 1.6 | 0.0 | 0.0 | 54.7 | 11.9 |
| 70 | 1 | 1.4 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.4 | 0.5 |
| | 2 | 1.3 | 0.3 | 2.7 | 4.2 | 1.2 | 1.9 | 0.0 | 0.0 | 4.2 | 5.6 |
| | 3 | 0.8 | 0.4 | 3.3 | 3.7 | 1.4 | 1.5 | 0.0 | 0.0 | 5.5 | 5.3 |
| | 4 | 1.0 | 0.3 | 2.5 | 2.4 | 1.3 | 1.3 | 0.0 | 0.0 | 4.8 | 3.8 |
| | 5 | 1.3 | 0.3 | 2.1 | 1.8 | 1.4 | 1.0 | 0.0 | 0.0 | 4.6 | 2.8 |
| | 6 | 1.4 | 0.4 | 1.6 | 1.6 | 0.9 | 0.7 | 0.0 | 0.0 | 4.0 | 2.3 |
| | 7 | 1.7 | 0.4 | 3.3 | 2.2 | 1.7 | 0.9 | 0.0 | 0.0 | 6.7 | 3.1 |
| | 8 | 2.2 | 0.5 | 10.1 | 4.2 | 3.0 | 1.1 | 0.0 | 0.0 | 15.3 | 5.3 |
| | 9 | 1.8 | 0.9 | 8.5 | 4.1 | 2.5 | 0.6 | 0.0 | 0.0 | 12.7 | 4.2 |
| | 10 | 1.5 | 0.4 | 9.3 | 2.3 | 2.3 | 0.5 | 0.0 | 0.0 | 13.1 | 2.9 |
| | 11 | 1.9 | 0.5 | 10.0 | 2.5 | 2.6 | 0.6 | 0.0 | 0.0 | 14.4 | 3.4 |
| | 12 | 1.6 | 0.6 | 9.6 | 3.4 | 2.4 | 0.7 | 0.0 | 0.0 | 13.5 | 4.5 |
| | 13 | 1.1 | 0.5 | 6.6 | 3.2 | 1.8 | 0.7 | 0.0 | 0.0 | 9.4 | 4.3 |
| | 14 | 0.6 | 0.3 | 3.9 | 2.3 | 1.0 | 0.6 | 0.0 | 0.0 | 5.3 | 3.4 |
| | 15 | 0.1 | 0.1 | 0.6 | 1.0 | 0.2 | 0.3 | 0.0 | 0.0 | 0.9 | 1.4 |
| | 16 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.2 |
| | All | 19.7 | 5.0 | 73.1 | 16.5 | 23.2 | 5.3 | 0.0 | 0.0 | 116.0 | 25.8 |
| 79 | 1 | 2.5 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 0.5 |
| | 2 | 1.4 | 0.3 | 0.9 | 2.4 | 0.2 | 0.5 | 0.0 | 0.0 | 2.5 | 2.8 |
| | 3 | 0.9 | 0.1 | 3.0 | 4.2 | 1.4 | 2.0 | 0.0 | 0.0 | 5.3 | 6.2 |
| | 4 | 1.4 | 0.2 | 3.8 | 4.9 | 1.8 | 2.2 | 0.0 | 0.0 | 7.0 | 7.1 |
| | 5 | 1.7 | 0.4 | 2.5 | 2.3 | 1.2 | 1.2 | 0.0 | 0.0 | 5.4 | 3.7 |
| | 6 | 1.9 | 0.6 | 1.7 | 1.2 | 1.0 | 0.7 | 0.0 | 0.0 | 4.5 | 2.1 |
| | 7 | 1.5 | 0.4 | 4.9 | 2.2 | 2.6 | 0.8 | 0.0 | 0.0 | 9.0 | 3.0 |
| | 8 | 1.7 | 0.2 | 5.4 | 3.3 | 3.1 | 1.7 | 0.0 | 0.0 | 10.2 | 4.9 |
| | 9 | 1.6 | 0.4 | 8.0 | 3.6 | 3.1 | 1.0 | 0.0 | 0.0 | 12.8 | 4.6 |
| | 10 | 1.6 | 0.3 | 11.6 | 2.8 | 3.2 | 0.7 | 0.0 | 0.0 | 16.4 | 3.3 |
| | 11 | 1.6 | 0.3 | 12.5 | 2.7 | 2.5 | 0.6 | 0.0 | 0.0 | 16.6 | 3.3 |
| | 12 | 1.5 | 0.3 | 10.6 | 2.1 | 2.1 | 0.5 | 0.0 | 0.0 | 14.2 | 2.6 |
| | 13 | 1.4 | 0.5 | 8.9 | 2.2 | 1.6 | 0.6 | 0.0 | 0.0 | 11.9 | 3.0 |
| | 14 | 1.0 | 0.4 | 6.6 | 2.4 | 1.5 | 0.6 | 0.0 | 0.0 | 9.1 | 3.4 |
| | 15 | 0.7 | 0.4 | 4.7 | 2.5 | 1.0 | 0.7 | 0.0 | 0.0 | 6.1 | 3.7 |
| | 16 | 0.4 | 0.3 | 2.6 | 2.1 | 0.5 | 0.5 | 0.0 | 0.0 | 3.1 | 2.9 |
| | 17 | 0.1 | 0.2 | 0.7 | 1.0 | 0.2 | 0.3 | 0.0 | 0.0 | 1.0 | 1.5 |
| | 18 | 0.0 | 0.0 | 0.1 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.3 |
| | All | 22.9 | 4.1 | 87.7 | 23.0 | 27.0 | 8.3 | 0.0 | 0.0 | 137.6 | 33.4 |

(cont'd)

TABLE 7. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 90 | 1 | 2.5 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.3 | 0.9 |
| | 2 | 2.3 | 0.4 | 2.2 | 2.5 | 1.3 | 1.3 | 0.1 | 0.1 | 5.2 | 3.9 |
| | 3 | 1.7 | 0.3 | 8.4 | 6.3 | 4.9 | 3.4 | 0.3 | 0.3 | 13.4 | 10.4 |
| | 4 | 1.6 | 0.3 | 7.4 | 6.3 | 3.2 | 2.6 | 0.2 | 0.2 | 11.0 | 9.2 |
| | 5 | 1.9 | 0.4 | 5.0 | 4.0 | 2.6 | 2.5 | 0.1 | 0.1 | 8.1 | 7.0 |
| | 6 | 2.0 | 0.3 | 3.2 | 2.0 | 1.8 | 1.0 | 0.1 | 0.1 | 6.7 | 3.4 |
| | 7 | 1.8 | 0.4 | 6.1 | 2.3 | 3.5 | 0.9 | 0.3 | 0.1 | 11.0 | 4.2 |
| | 8 | 2.3 | 0.4 | 5.7 | 2.8 | 4.2 | 2.1 | 0.3 | 0.1 | 11.7 | 5.7 |
| | 9 | 2.2 | 0.5 | 5.1 | 2.2 | 3.1 | 1.3 | 0.3 | 0.1 | 10.0 | 4.3 |
| | 10 | 1.1 | 0.3 | 7.2 | 4.6 | 2.0 | 1.2 | 0.2 | 0.1 | 9.9 | 5.7 |
| | 11 | 1.4 | 0.3 | 11.6 | 2.4 | 2.3 | 0.7 | 0.2 | 0.1 | 14.5 | 4.8 |
| | 12 | 1.4 | 0.2 | 13.2 | 3.1 | 2.5 | 0.6 | 0.2 | 0.1 | 16.3 | 5.4 |
| | 13 | 1.5 | 0.3 | 11.5 | 3.0 | 1.9 | 0.4 | 0.2 | 0.1 | 14.3 | 5.2 |
| | 14 | 1.1 | 0.3 | 10.0 | 3.6 | 1.6 | 0.5 | 0.3 | 0.1 | 12.2 | 5.2 |
| | 15 | 0.8 | 0.3 | 8.0 | 2.7 | 1.2 | 0.5 | 0.3 | 0.1 | 9.7 | 4.2 |
| | 16 | 0.6 | 0.3 | 4.9 | 3.0 | 0.8 | 0.5 | 0.2 | 0.1 | 6.1 | 3.9 |
| | 17 | 0.5 | 0.6 | 2.5 | 1.6 | 0.4 | 0.3 | 0.1 | 0.1 | 3.3 | 2.4 |
| | 18 | 0.2 | 0.1 | 1.1 | 0.9 | 0.2 | 0.1 | 0.1 | 0.1 | 1.5 | 1.2 |
| | 19 | 0.0 | 0.0 | 0.3 | 0.4 | 0.0 | 0.1 | 0.0 | 0.0 | 0.3 | 0.5 |
| | 20 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| | ALL | 27.0 | 4.1 | 111.4 | 21.1 | 36.7 | 10.2 | 3.5 | 0.9 | 167.4 | 55.0 |
| 100 | 1 | 2.6 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.6 | 0.7 |
| | 2 | 2.4 | 0.6 | 0.8 | 1.5 | 0.5 | 1.1 | 0.1 | 0.2 | 3.8 | 2.8 |
| | 3 | 1.5 | 0.3 | 3.8 | 4.1 | 2.3 | 2.2 | 0.3 | 0.5 | 7.9 | 6.5 |
| | 4 | 2.2 | 0.5 | 8.0 | 5.7 | 3.7 | 2.5 | 0.7 | 0.6 | 14.7 | 8.7 |
| | 5 | 2.6 | 0.6 | 2.3 | 2.8 | 1.4 | 1.7 | 0.4 | 0.4 | 6.6 | 4.8 |
| | 6 | 2.5 | 0.7 | 4.7 | 3.5 | 2.4 | 1.8 | 0.5 | 0.3 | 10.2 | 5.5 |
| | 7 | 2.5 | 0.7 | 7.1 | 2.9 | 3.9 | 1.6 | 0.8 | 0.4 | 14.3 | 5.0 |
| | 8 | 2.7 | 0.7 | 7.6 | 3.5 | 4.3 | 2.2 | 1.2 | 0.5 | 15.8 | 6.1 |
| | 9 | 2.1 | 0.5 | 7.3 | 2.4 | 3.6 | 1.9 | 1.1 | 0.4 | 14.1 | 4.4 |
| | 10 | 2.7 | 0.8 | 8.2 | 2.4 | 3.1 | 0.8 | 0.9 | 0.3 | 14.9 | 3.3 |
| | 11 | 2.9 | 0.6 | 14.6 | 4.6 | 3.3 | 0.7 | 0.8 | 0.3 | 21.6 | 5.7 |
| | 12 | 2.5 | 0.7 | 16.0 | 3.4 | 3.4 | 0.8 | 1.1 | 0.5 | 23.0 | 4.7 |
| | 13 | 2.4 | 0.6 | 14.5 | 3.5 | 3.0 | 0.7 | 1.2 | 0.5 | 21.2 | 4.7 |
| | 14 | 1.9 | 0.5 | 12.4 | 3.3 | 2.6 | 0.6 | 1.5 | 0.5 | 18.5 | 4.4 |
| | 15 | 1.3 | 0.3 | 8.9 | 2.6 | 1.9 | 0.5 | 1.4 | 0.6 | 13.4 | 3.4 |
| | 16 | 1.0 | 0.5 | 7.2 | 3.0 | 1.3 | 0.5 | 1.2 | 0.6 | 10.6 | 4.1 |
| | 17 | 0.7 | 0.3 | 5.7 | 2.0 | 0.9 | 0.4 | 0.8 | 0.5 | 8.2 | 3.0 |
| | 18 | 0.4 | 0.2 | 3.5 | 2.3 | 0.6 | 0.4 | 0.6 | 0.5 | 5.0 | 3.1 |
| | 19 | 0.1 | 0.2 | 1.3 | 1.6 | 0.2 | 0.2 | 0.2 | 0.3 | 1.7 | 2.1 |
| | 20 | 0.0 | 0.0 | 0.3 | 0.6 | 0.0 | 0.1 | 0.1 | 0.1 | 0.4 | 0.8 |
| | ALL | 37.1 | 8.0 | 134.3 | 23.8 | 42.3 | 11.3 | 14.9 | 3.9 | 228.7 | 41.2 |
| 113 | 1 | 4.3 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.3 | 2.1 |
| | 2 | 2.6 | 0.6 | 1.8 | 2.4 | 2.0 | 2.5 | 1.0 | 1.3 | 6.2 | 6.0 |
| | 3 | 2.2 | 0.6 | 2.1 | 3.0 | 2.3 | 2.9 | 0.9 | 1.5 | 7.5 | 7.5 |
| | 4 | 2.7 | 0.5 | 3.7 | 7.4 | 6.1 | 8.8 | 2.7 | 4.2 | 15.3 | 17.9 |
| | 5 | 3.4 | 0.7 | 2.3 | 2.9 | 5.1 | 5.1 | 3.0 | 2.7 | 13.8 | 9.2 |
| | 6 | 3.5 | 0.9 | 5.3 | 4.6 | 7.1 | 5.7 | 3.7 | 3.0 | 19.5 | 13.7 |
| | 7 | 3.6 | 0.8 | 7.8 | 3.7 | 8.6 | 4.0 | 5.1 | 2.6 | 25.1 | 10.3 |
| | 8 | 3.9 | 0.7 | 6.5 | 1.7 | 6.7 | 2.0 | 5.2 | 1.8 | 22.3 | 4.8 |
| | 9 | 3.6 | 0.7 | 4.6 | 3.1 | 4.5 | 3.2 | 4.0 | 2.1 | 16.7 | 8.2 |
| | 10 | 4.2 | 0.8 | 6.8 | 3.6 | 3.4 | 1.2 | 3.1 | 1.1 | 17.5 | 5.1 |
| | 11 | 4.4 | 0.8 | 15.3 | 6.0 | 5.5 | 1.6 | 3.7 | 1.2 | 28.9 | 8.2 |
| | 12 | 4.4 | 0.7 | 19.1 | 3.1 | 5.5 | 0.9 | 4.2 | 1.2 | 33.2 | 4.2 |
| | 13 | 3.5 | 0.6 | 17.0 | 3.7 | 4.8 | 0.9 | 3.4 | 1.4 | 28.7 | 5.7 |
| | 14 | 2.4 | 0.5 | 14.4 | 3.4 | 4.2 | 1.0 | 4.2 | 1.4 | 25.3 | 5.2 |
| | 15 | 2.0 | 0.4 | 10.5 | 3.6 | 3.1 | 0.9 | 4.0 | 1.3 | 19.6 | 5.2 |
| | 16 | 1.4 | 0.5 | 8.7 | 3.0 | 2.3 | 0.7 | 2.8 | 1.6 | 15.2 | 4.5 |
| | 17 | 0.9 | 0.4 | 6.0 | 2.3 | 1.5 | 0.7 | 2.2 | 0.9 | 10.5 | 4.0 |
| | 18 | 0.3 | 0.4 | 2.6 | 3.0 | 0.6 | 0.8 | 1.1 | 1.3 | 4.6 | 5.1 |
| | 19 | 0.1 | 0.2 | 0.4 | 0.8 | 0.1 | 0.2 | 0.2 | 0.5 | 0.7 | 1.4 |
| | ALL | 55.4 | 9.4 | 134.5 | 22.1 | 73.0 | 21.0 | 54.0 | 16.4 | 315.0 | 60.2 |

TABLE 7. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 127 | 1 | 2.3 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.3 | 1.0 |
| | 2 | 2.0 | 0.6 | 1.9 | 4.6 | 2.3 | 4.6 | 1.9 | 5.0 | 8.1 | 13.9 |
| | 3 | 1.6 | 0.4 | 4.5 | 4.8 | 4.3 | 4.4 | 4.0 | 4.1 | 14.4 | 13.2 |
| | 4 | 2.0 | 0.7 | 8.2 | 6.2 | 9.2 | 7.3 | 0.0 | 0.0 | 19.4 | 13.8 |
| | 5 | 2.4 | 0.7 | 2.7 | 5.0 | 3.0 | 5.2 | 2.9 | 3.4 | 11.0 | 13.6 |
| | 6 | 2.7 | 1.2 | 5.6 | 4.1 | 6.1 | 4.7 | 6.5 | 3.8 | 21.2 | 12.7 |
| | 7 | 3.0 | 0.8 | 10.3 | 4.8 | 10.9 | 4.3 | 11.1 | 4.3 | 31.9 | 12.5 |
| | 8 | 3.7 | 1.3 | 9.9 | 4.1 | 11.7 | 5.7 | 0.0 | 0.0 | 25.3 | 10.4 |
| | 9 | 3.7 | 1.4 | 6.5 | 3.0 | 8.6 | 5.4 | 11.6 | 5.8 | 30.5 | 14.8 |
| | 10 | 3.9 | 1.2 | 5.9 | 2.2 | 5.6 | 3.2 | 8.8 | 3.5 | 24.1 | 9.0 |
| | 11 | 4.2 | 1.4 | 9.7 | 5.2 | 5.4 | 2.6 | 6.8 | 2.9 | 26.2 | 10.5 |
| | 12 | 4.2 | 1.7 | 15.6 | 6.0 | 6.5 | 2.5 | 7.3 | 3.3 | 33.6 | 11.9 |
| | 13 | 3.7 | 1.5 | 16.7 | 6.1 | 6.0 | 2.3 | 0.0 | 0.0 | 25.7 | 9.8 |
| | 14 | 3.1 | 1.4 | 13.7 | 5.1 | 4.3 | 1.7 | 7.6 | 3.1 | 28.8 | 10.4 |
| | 15 | 2.5 | 1.2 | 10.7 | 4.8 | 3.9 | 1.7 | 7.2 | 3.7 | 24.4 | 10.5 |
| | 16 | 1.9 | 0.9 | 10.1 | 4.3 | 3.2 | 1.5 | 6.8 | 3.8 | 22.0 | 9.2 |
| | 17 | 1.3 | 0.8 | 7.2 | 3.6 | 2.2 | 1.5 | 4.7 | 3.0 | 16.0 | 8.0 |
| | 18 | 0.7 | 0.6 | 4.5 | 3.4 | 1.2 | 1.1 | 2.9 | 2.3 | 9.2 | 7.0 |
| | 19 | 0.2 | 0.2 | 1.4 | 2.6 | 0.4 | 0.6 | 1.9 | 1.7 | 2.9 | 4.4 |
| | 20 | 0.0 | 0.0 | 0.3 | 0.8 | 0.0 | 0.0 | 0.3 | 0.6 | 0.4 | 1.0 |
| | All | 48.1 | 17.3 | 144.7 | 39.7 | 95.0 | 36.0 | 91.2 | 24.4 | 386.8 | 119.6 |
| 139 | 1 | 4.6 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.6 | 1.0 |
| | 2 | 3.1 | 0.7 | 0.7 | 1.4 | 0.3 | 0.7 | 1.3 | 2.1 | 5.4 | 4.1 |
| | 3 | 2.5 | 0.6 | 4.3 | 5.5 | 1.8 | 2.0 | 6.2 | 9.7 | 14.8 | 17.1 |
| | 4 | 3.2 | 0.7 | 3.3 | 3.3 | 3.9 | 6.7 | 5.3 | 4.4 | 15.7 | 12.7 |
| | 5 | 2.8 | 1.0 | 1.7 | 2.1 | 1.3 | 1.0 | 3.6 | 3.2 | 9.4 | 5.9 |
| | 6 | 2.6 | 0.5 | 3.7 | 4.2 | 1.9 | 3.4 | 6.8 | 6.2 | 14.7 | 12.9 |
| | 7 | 2.7 | 0.5 | 6.1 | 3.3 | 2.7 | 2.3 | 10.9 | 4.7 | 22.4 | 9.3 |
| | 8 | 2.7 | 0.4 | 4.6 | 2.0 | 2.5 | 1.4 | 12.1 | 3.5 | 21.9 | 5.2 |
| | 9 | 2.6 | 0.5 | 3.9 | 2.3 | 2.2 | 1.1 | 13.3 | 5.1 | 22.1 | 7.6 |
| | 10 | 2.7 | 0.5 | 2.7 | 1.8 | 1.5 | 0.9 | 8.6 | 3.9 | 15.4 | 4.5 |
| | 11 | 2.6 | 0.4 | 5.4 | 3.9 | 2.4 | 1.6 | 7.7 | 2.6 | 18.0 | 6.5 |
| | 12 | 2.6 | 0.4 | 10.2 | 5.9 | 3.4 | 1.5 | 8.9 | 3.0 | 25.1 | 8.7 |
| | 13 | 2.6 | 0.5 | 11.5 | 4.1 | 3.9 | 1.1 | 9.9 | 3.4 | 27.9 | 7.6 |
| | 14 | 2.3 | 0.7 | 10.6 | 2.9 | 3.7 | 0.7 | 9.5 | 3.8 | 26.0 | 5.1 |
| | 15 | 1.4 | 1.0 | 7.3 | 2.2 | 2.7 | 0.7 | 8.3 | 2.8 | 19.8 | 5.2 |
| | 16 | 1.2 | 0.5 | 5.5 | 2.0 | 2.4 | 1.3 | 7.4 | 3.5 | 16.5 | 5.9 |
| | 17 | 0.5 | 0.6 | 4.6 | 1.7 | 1.6 | 0.7 | 5.1 | 3.1 | 11.9 | 4.5 |
| | 18 | 0.1 | 0.1 | 2.8 | 2.4 | 0.8 | 0.7 | 2.5 | 2.3 | 6.1 | 4.8 |
| | 19 | 0.0 | 0.0 | 1.2 | 1.6 | 0.4 | 0.6 | 1.5 | 2.3 | 3.1 | 4.2 |
| | All | 42.7 | 7.9 | 90.2 | 23.9 | 39.0 | 12.8 | 128.9 | 27.6 | 300.8 | 47.0 |
| 149 | 1 | 4.4 | 1.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.4 | 1.6 |
| | 2 | 3.1 | 0.7 | 0.0 | 0.0 | 1.3 | 2.4 | 2.4 | 4.5 | 6.8 | 7.0 |
| | 3 | 2.1 | 0.4 | 0.1 | 0.1 | 1.7 | 2.5 | 4.2 | 5.2 | 7.0 | 7.3 |
| | 4 | 2.9 | 0.6 | 0.2 | 0.3 | 2.9 | 2.5 | 0.0 | 0.0 | 5.9 | 2.8 |
| | 5 | 3.1 | 0.6 | 0.1 | 0.2 | 1.7 | 1.6 | 3.9 | 4.0 | 8.7 | 5.6 |
| | 6 | 3.3 | 0.7 | 0.2 | 0.4 | 2.4 | 1.4 | 6.6 | 3.9 | 12.4 | 5.0 |
| | 7 | 3.3 | 0.8 | 0.4 | 0.6 | 5.3 | 1.5 | 16.0 | 8.7 | 25.0 | 10.5 |
| | 8 | 3.1 | 0.6 | 0.3 | 0.3 | 4.4 | 1.8 | 0.0 | 0.0 | 7.7 | 2.1 |
| | 9 | 2.8 | 0.7 | 0.1 | 0.3 | 3.2 | 1.8 | 17.2 | 5.5 | 23.5 | 7.2 |
| | 10 | 2.9 | 0.6 | 0.3 | 0.5 | 1.8 | 1.3 | 11.5 | 4.0 | 16.5 | 5.3 |
| | 11 | 3.6 | 0.7 | 0.3 | 0.4 | 1.1 | 0.4 | 10.0 | 2.0 | 14.9 | 2.6 |
| | 12 | 4.0 | 0.9 | 0.3 | 0.4 | 0.9 | 0.7 | 10.2 | 2.4 | 15.4 | 3.2 |
| | 13 | 3.5 | 1.0 | 0.1 | 0.2 | 0.9 | 0.7 | 0.0 | 0.0 | 4.5 | 1.2 |
| | 14 | 2.8 | 0.7 | 0.0 | 0.1 | 1.3 | 0.7 | 9.9 | 2.5 | 14.0 | 3.0 |
| | 15 | 2.0 | 0.5 | 0.0 | 0.0 | 1.2 | 0.7 | 9.4 | 3.4 | 12.5 | 4.1 |
| | 16 | 1.6 | 0.5 | 0.1 | 0.2 | 0.7 | 0.8 | 7.9 | 4.3 | 10.2 | 5.0 |
| | 17 | 1.1 | 0.5 | 0.0 | 0.0 | 0.3 | 0.4 | 4.7 | 2.4 | 6.0 | 2.9 |
| | 18 | 0.6 | 0.5 | 0.0 | 0.0 | 0.2 | 0.6 | 3.1 | 2.6 | 3.9 | 3.1 |
| | 19 | 0.1 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 1.1 | 0.7 | 1.2 |
| | 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.8 | 0.2 | 0.8 |
| | All | 50.2 | 10.1 | 2.4 | 1.6 | 31.2 | 7.6 | 116.7 | 13.3 | 200.4 | 26.6 |

TABLE 8. Aerial iron accumulation means and standard deviations for each day after planting (DAP), node, and plant part. Values are in g/ha, and planting date was 143 (23 May).

| | | ---Stems--- | | ---Leaves--- | | --Petioles-- | | ----Pods---- | | ---Totals--- | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DAP | Node | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev |
| 44 | 1 | 4.1 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.1 | 1.7 |
| | 2 | 1.5 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 0.4 |
| | 3 | 1.3 | 0.3 | 2.7 | 1.8 | 0.9 | 1.3 | 0.0 | 0.0 | 4.9 | 2.9 |
| | 4 | 1.6 | 0.5 | 16.7 | 4.6 | 1.9 | 0.7 | 0.0 | 0.0 | 20.2 | 5.2 |
| | 5 | 1.8 | 0.5 | 17.1 | 5.7 | 2.3 | 0.7 | 0.0 | 0.0 | 21.2 | 6.2 |
| | 6 | 1.7 | 0.4 | 18.2 | 6.2 | 1.8 | 0.7 | 0.0 | 0.0 | 21.7 | 7.1 |
| | 7 | 1.2 | 0.6 | 10.7 | 5.8 | 1.2 | 0.7 | 0.0 | 0.0 | 13.1 | 6.3 |
| | 8 | 0.7 | 1.0 | 2.1 | 3.0 | 0.3 | 0.4 | 0.0 | 0.0 | 3.1 | 4.0 |
| | 9 | 0.0 | 0.0 | 0.2 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.5 |
| | All | 13.8 | 4.0 | 67.7 | 17.3 | 8.4 | 2.5 | 0.0 | 0.0 | 89.9 | 22.2 |
| 57 | 1 | 4.2 | 2.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.2 | 2.2 |
| | 2 | 1.1 | 0.5 | 2.5 | 6.4 | 0.8 | 2.0 | 0.0 | 0.0 | 4.4 | 8.5 |
| | 3 | 1.8 | 1.6 | 11.7 | 9.7 | 4.7 | 4.5 | 0.0 | 0.0 | 18.6 | 16.0 |
| | 4 | 3.0 | 0.6 | 18.0 | 12.4 | 4.8 | 3.8 | 0.0 | 0.0 | 25.8 | 15.9 |
| | 5 | 3.7 | 0.8 | 40.1 | 18.0 | 6.8 | 2.3 | 0.0 | 0.0 | 50.5 | 19.3 |
| | 6 | 4.6 | 1.9 | 39.3 | 9.4 | 7.0 | 2.5 | 0.0 | 0.0 | 50.9 | 12.0 |
| | 7 | 4.7 | 1.3 | 37.9 | 10.9 | 7.2 | 2.9 | 0.0 | 0.0 | 49.8 | 13.9 |
| | 8 | 4.8 | 1.6 | 31.9 | 9.7 | 7.4 | 3.4 | 0.0 | 0.0 | 44.1 | 13.6 |
| | 9 | 4.5 | 1.9 | 22.3 | 8.7 | 5.2 | 1.9 | 0.0 | 0.0 | 32.0 | 11.5 |
| | 10 | 2.8 | 2.0 | 12.9 | 5.5 | 3.2 | 3.1 | 0.0 | 0.0 | 17.3 | 11.1 |
| | 11 | 0.9 | 1.0 | 2.7 | 3.8 | 0.7 | 1.1 | 0.0 | 0.0 | 3.9 | 5.3 |
| | 12 | 0.1 | 0.3 | 0.2 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.9 |
| | All | 35.9 | 9.4 | 217.9 | 66.7 | 47.6 | 24.5 | 0.0 | 0.0 | 304.1 | 103.3 |
| 70 | 1 | 6.6 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.6 | 2.1 |
| | 2 | 4.6 | 1.1 | 10.2 | 16.0 | 4.2 | 6.5 | 0.0 | 0.0 | 15.4 | 20.9 |
| | 3 | 2.7 | 1.4 | 11.5 | 12.5 | 4.3 | 4.7 | 0.0 | 0.0 | 18.5 | 17.6 |
| | 4 | 2.5 | 0.6 | 9.4 | 9.0 | 3.7 | 3.6 | 0.0 | 0.0 | 15.6 | 12.7 |
| | 5 | 2.8 | 0.7 | 8.9 | 7.7 | 4.4 | 3.0 | 0.0 | 0.0 | 15.6 | 10.7 |
| | 6 | 1.5 | 1.7 | 6.4 | 6.6 | 2.7 | 2.0 | 0.0 | 0.0 | 10.6 | 7.7 |
| | 7 | 0.0 | 0.0 | 10.6 | 6.4 | 4.5 | 2.6 | 0.0 | 0.0 | 15.1 | 8.3 |
| | 8 | 0.0 | 0.0 | 23.5 | 10.0 | 6.8 | 2.1 | 0.0 | 0.0 | 30.3 | 11.3 |
| | 9 | 0.9 | 1.3 | 21.6 | 11.7 | 4.6 | 2.0 | 0.0 | 0.0 | 27.1 | 12.2 |
| | 10 | 2.7 | 0.6 | 24.2 | 4.6 | 3.3 | 0.8 | 0.0 | 0.0 | 30.2 | 5.2 |
| | 11 | 3.0 | 0.8 | 30.1 | 7.5 | 3.4 | 0.8 | 0.0 | 0.0 | 36.5 | 8.6 |
| | 12 | 3.2 | 1.5 | 28.3 | 7.8 | 3.6 | 1.2 | 0.0 | 0.0 | 35.1 | 9.8 |
| | 13 | 2.9 | 1.3 | 16.3 | 7.4 | 2.4 | 1.3 | 0.0 | 0.0 | 21.6 | 8.8 |
| | 14 | 2.1 | 1.1 | 8.9 | 5.2 | 2.1 | 1.2 | 0.0 | 0.0 | 12.6 | 7.6 |
| | 15 | 0.5 | 0.7 | 1.5 | 2.3 | 0.4 | 0.7 | 0.0 | 0.0 | 2.4 | 3.7 |
| | 16 | 0.0 | 0.0 | 0.1 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.6 |
| | All | 36.1 | 7.7 | 208.4 | 45.5 | 48.6 | 13.3 | 0.0 | 0.0 | 293.1 | 63.6 |
| 79 | 1 | 8.1 | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.1 | 2.4 |
| | 2 | 4.1 | 1.0 | 3.2 | 8.0 | 0.8 | 2.1 | 0.0 | 0.0 | 8.1 | 10.2 |
| | 3 | 3.3 | 1.5 | 10.0 | 13.6 | 4.9 | 6.5 | 0.0 | 0.0 | 18.1 | 20.2 |
| | 4 | 5.5 | 1.7 | 12.6 | 16.1 | 5.7 | 7.1 | 0.0 | 0.0 | 23.8 | 24.3 |
| | 5 | 4.7 | 1.2 | 9.2 | 8.7 | 4.1 | 4.2 | 0.0 | 0.0 | 17.9 | 13.3 |
| | 6 | 6.0 | 2.4 | 7.6 | 5.2 | 3.6 | 2.5 | 0.0 | 0.0 | 17.2 | 7.7 |
| | 7 | 7.5 | 2.8 | 21.0 | 7.2 | 9.4 | 2.6 | 0.0 | 0.0 | 37.9 | 10.4 |
| | 8 | 6.3 | 1.0 | 19.9 | 10.0 | 9.3 | 4.6 | 0.0 | 0.0 | 35.4 | 14.6 |
| | 9 | 5.5 | 1.3 | 23.8 | 8.6 | 7.3 | 2.4 | 0.0 | 0.0 | 36.5 | 11.3 |
| | 10 | 4.4 | 0.7 | 31.4 | 7.0 | 6.8 | 1.8 | 0.0 | 0.0 | 42.6 | 8.3 |
| | 11 | 4.4 | 0.8 | 34.0 | 6.7 | 4.5 | 0.8 | 0.0 | 0.0 | 42.9 | 7.5 |
| | 12 | 3.7 | 0.9 | 31.6 | 5.7 | 4.2 | 0.9 | 0.0 | 0.0 | 39.6 | 6.6 |
| | 13 | 2.5 | 0.8 | 26.6 | 6.3 | 3.8 | 0.8 | 0.0 | 0.0 | 32.8 | 6.8 |
| | 14 | 2.0 | 0.9 | 21.3 | 8.6 | 3.5 | 1.4 | 0.0 | 0.0 | 26.7 | 10.7 |
| | 15 | 1.5 | 0.9 | 13.5 | 8.0 | 2.3 | 1.6 | 0.0 | 0.0 | 16.5 | 10.7 |
| | 16 | 0.9 | 0.7 | 7.1 | 6.4 | 1.1 | 1.0 | 0.0 | 0.0 | 8.0 | 8.0 |
| | 17 | 0.3 | 0.5 | 2.1 | 3.1 | 0.4 | 0.7 | 0.0 | 0.0 | 2.7 | 4.3 |
| | 18 | 0.0 | 0.0 | 0.2 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.8 |
| | All | 70.4 | 10.4 | 273.2 | 73.2 | 71.5 | 22.7 | 0.0 | 0.0 | 415.0 | 103.3 |

TABLE 8. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 90 | 1 | 7.5 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.0 | 2.5 |
| | 2 | 7.3 | 1.7 | 8.7 | 9.6 | 0.8 | 3.1 | 0.2 | 0.3 | 14.8 | 11.1 |
| | 3 | 5.2 | 0.8 | 26.5 | 20.1 | 5.2 | 13.2 | 0.7 | 0.8 | 33.3 | 30.9 |
| | 4 | 5.3 | 1.5 | 24.1 | 20.1 | 7.5 | 15.6 | 0.5 | 0.4 | 33.1 | 32.9 |
| | 5 | 6.6 | 1.5 | 14.0 | 9.3 | 1.0 | 3.6 | 0.3 | 0.3 | 18.7 | 12.3 |
| | 6 | 7.0 | 1.0 | 11.0 | 7.6 | 6.3 | 12.7 | 0.4 | 0.2 | 23.1 | 17.3 |
| | 7 | 5.8 | 1.0 | 20.7 | 9.1 | 13.3 | 7.3 | 0.8 | 0.3 | 38.0 | 17.3 |
| | 8 | 7.4 | 2.4 | 21.0 | 11.1 | 10.7 | 5.8 | 0.9 | 0.3 | 37.5 | 19.7 |
| | 9 | 6.5 | 1.3 | 16.2 | 7.4 | 11.8 | 6.1 | 0.0 | 0.0 | 32.3 | 13.7 |
| | 10 | 5.4 | 5.4 | 17.2 | 7.8 | 5.6 | 4.2 | 0.0 | 0.0 | 26.5 | 13.4 |
| | 11 | 7.0 | 2.4 | 28.0 | 5.5 | 3.5 | 1.0 | 0.0 | 0.0 | 36.2 | 11.4 |
| | 12 | 7.8 | 2.9 | 31.1 | 4.3 | 15.6 | 10.4 | 0.0 | 0.0 | 51.1 | 19.3 |
| | 13 | 0.1 | 0.2 | 27.4 | 5.4 | 5.8 | 5.6 | 0.0 | 0.0 | 31.2 | 10.1 |
| | 14 | 0.6 | 1.7 | 21.8 | 6.3 | 2.0 | 0.8 | 0.0 | 0.0 | 22.9 | 9.6 |
| | 15 | 0.0 | 0.0 | 18.0 | 6.0 | 1.8 | 1.2 | 0.3 | 0.3 | 18.7 | 8.2 |
| | 16 | 1.2 | 1.3 | 12.7 | 7.7 | 2.1 | 1.4 | 0.1 | 0.2 | 15.1 | 10.0 |
| | 17 | 0.9 | 1.2 | 7.5 | 5.3 | 1.7 | 1.2 | 0.1 | 0.1 | 9.7 | 7.6 |
| | 18 | 0.3 | 0.4 | 3.6 | 2.7 | 0.7 | 0.5 | 0.1 | 0.1 | 4.4 | 3.6 |
| | 19 | 0.0 | 0.0 | 0.9 | 1.3 | 0.1 | 0.2 | 0.0 | 0.0 | 1.0 | 1.5 |
| | All | 82.0 | 12.7 | 303.9 | 84.4 | 94.3 | 33.9 | 4.4 | 1.6 | 454.3 | 164.6 |
| 100 | 1 | 0.1 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.5 |
| | 2 | 1.9 | 3.2 | 2.5 | 4.6 | 2.1 | 4.3 | 0.3 | 0.6 | 6.8 | 9.6 |
| | 3 | 4.9 | 3.3 | 12.9 | 16.0 | 5.0 | 6.3 | 0.9 | 1.1 | 23.7 | 20.0 |
| | 4 | 10.6 | 4.2 | 24.9 | 17.8 | 11.6 | 7.3 | 1.7 | 1.3 | 48.7 | 27.5 |
| | 5 | 9.2 | 5.5 | 9.6 | 11.9 | 4.9 | 6.0 | 0.9 | 1.2 | 24.6 | 20.4 |
| | 6 | 2.8 | 3.9 | 18.8 | 13.9 | 9.5 | 6.3 | 1.6 | 1.1 | 32.7 | 22.3 |
| | 7 | 5.5 | 5.4 | 27.2 | 13.2 | 13.7 | 5.4 | 2.3 | 1.3 | 48.8 | 19.8 |
| | 8 | 5.7 | 8.5 | 27.1 | 13.3 | 14.3 | 7.5 | 3.3 | 1.5 | 50.4 | 25.3 |
| | 9 | 7.0 | 6.0 | 23.7 | 9.4 | 11.4 | 5.7 | 3.0 | 1.2 | 45.1 | 17.2 |
| | 10 | 8.0 | 4.5 | 21.9 | 6.4 | 9.1 | 3.2 | 2.5 | 1.0 | 41.4 | 9.7 |
| | 11 | 7.7 | 4.1 | 31.5 | 9.5 | 8.3 | 1.9 | 2.2 | 0.7 | 49.7 | 12.1 |
| | 12 | 3.6 | 3.7 | 32.0 | 7.0 | 8.2 | 2.2 | 3.0 | 1.4 | 46.7 | 9.5 |
| | 13 | 2.8 | 3.0 | 28.9 | 6.4 | 9.2 | 3.2 | 3.1 | 1.2 | 44.0 | 10.4 |
| | 14 | 2.4 | 2.1 | 24.0 | 6.2 | 7.2 | 1.8 | 3.7 | 1.2 | 37.2 | 9.2 |
| | 15 | 2.7 | 2.1 | 17.6 | 5.3 | 5.3 | 1.7 | 3.3 | 1.3 | 28.9 | 9.1 |
| | 16 | 2.3 | 1.8 | 14.4 | 6.1 | 2.7 | 1.2 | 2.6 | 1.2 | 22.0 | 8.8 |
| | 17 | 1.8 | 1.3 | 12.1 | 4.5 | 2.5 | 1.8 | 1.7 | 1.0 | 18.1 | 7.3 |
| | 18 | 0.9 | 0.8 | 6.7 | 4.3 | 1.4 | 1.1 | 1.2 | 1.0 | 10.2 | 6.4 |
| | 19 | 0.3 | 0.4 | 2.5 | 3.1 | 0.4 | 0.5 | 0.4 | 0.6 | 3.6 | 4.4 |
| | 20 | 0.0 | 0.0 | 0.6 | 1.2 | 0.1 | 0.1 | 0.0 | 0.0 | 0.7 | 1.4 |
| | All | 80.0 | 24.5 | 338.8 | 76.6 | 126.8 | 37.9 | 37.5 | 9.8 | 583.1 | 133.2 |
| 113 | 1 | 13.9 | 6.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.9 | 6.3 |
| | 2 | 7.3 | 1.3 | 4.7 | 7.3 | 7.0 | 9.6 | 3.8 | 5.7 | 18.9 | 19.0 |
| | 3 | 5.9 | 1.4 | 4.4 | 7.1 | 8.4 | 15.6 | 2.3 | 4.3 | 21.0 | 20.9 |
| | 4 | 7.6 | 1.8 | 13.6 | 23.2 | 15.1 | 20.2 | 8.2 | 11.8 | 44.6 | 53.6 |
| | 5 | 9.6 | 2.2 | 15.9 | 24.8 | 12.7 | 13.5 | 7.0 | 8.6 | 45.2 | 46.9 |
| | 6 | 9.4 | 2.2 | 22.6 | 18.4 | 18.2 | 15.1 | 10.4 | 9.2 | 60.6 | 43.3 |
| | 7 | 8.4 | 2.3 | 20.8 | 16.1 | 23.9 | 11.5 | 13.3 | 7.1 | 66.4 | 26.6 |
| | 8 | 8.6 | 1.4 | 16.5 | 11.3 | 17.2 | 6.0 | 13.9 | 6.0 | 56.2 | 15.7 |
| | 9 | 8.8 | 2.0 | 14.4 | 14.1 | 11.5 | 8.1 | 11.7 | 5.4 | 46.5 | 25.3 |
| | 10 | 8.9 | 1.9 | 25.6 | 14.7 | 7.4 | 4.0 | 8.0 | 3.2 | 49.9 | 19.7 |
| | 11 | 9.4 | 1.9 | 45.0 | 14.6 | 9.1 | 3.0 | 10.1 | 4.0 | 73.5 | 20.2 |
| | 12 | 8.7 | 1.6 | 55.8 | 10.1 | 8.4 | 2.0 | 10.5 | 2.8 | 83.4 | 14.3 |
| | 13 | 7.5 | 1.7 | 48.6 | 8.5 | 6.9 | 1.9 | 13.3 | 5.8 | 76.4 | 15.2 |
| | 14 | 5.4 | 0.7 | 43.9 | 10.3 | 7.2 | 3.4 | 14.9 | 4.9 | 71.4 | 15.9 |
| | 15 | 4.9 | 1.6 | 33.2 | 8.2 | 4.4 | 1.6 | 14.0 | 5.1 | 56.5 | 12.7 |
| | 16 | 3.3 | 1.1 | 20.9 | 13.9 | 3.2 | 1.7 | 7.2 | 6.5 | 34.6 | 17.8 |
| | 17 | 2.1 | 1.2 | 16.7 | 9.9 | 2.3 | 1.4 | 6.4 | 5.0 | 27.5 | 11.7 |
| | 18 | 0.6 | 0.8 | 5.0 | 5.4 | 0.7 | 1.0 | 4.2 | 5.2 | 10.4 | 11.3 |
| | 19 | 0.2 | 0.5 | 0.9 | 1.9 | 0.1 | 0.2 | 0.5 | 1.5 | 1.7 | 3.5 |
| | All | 130.4 | 24.8 | 407.4 | 65.4 | 162.0 | 63.7 | 158.8 | 53.4 | 858.6 | 176.2 |

(cont'd)

TABLE 8. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 127 | 1 | 24.5 | 9.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 24.5 | 9.4 |
| | 2 | 19.9 | 5.3 | 1.3 | 4.6 | 5.7 | 11.0 | 4.9 | 12.3 | 31.7 | 24.3 |
| | 3 | 9.8 | 3.8 | 6.3 | 14.7 | 12.7 | 13.7 | 6.8 | 10.4 | 35.6 | 34.9 |
| | 4 | 8.0 | 4.2 | 34.7 | 29.1 | 28.4 | 22.9 | 0.0 | 0.0 | 71.0 | 54.9 |
| | 5 | 5.4 | 4.1 | 13.3 | 26.4 | 9.1 | 17.3 | 8.1 | 10.6 | 35.9 | 55.3 |
| | 6 | 5.9 | 5.0 | 19.8 | 15.3 | 14.9 | 12.7 | 15.3 | 9.3 | 58.5 | 40.1 |
| | 7 | 11.0 | 3.0 | 30.6 | 16.3 | 20.5 | 8.9 | 24.0 | 9.5 | 75.7 | 33.0 |
| | 8 | 11.7 | 4.0 | 29.3 | 12.4 | 19.5 | 9.4 | 0.0 | 0.0 | 60.5 | 24.1 |
| | 9 | 12.1 | 5.1 | 21.3 | 10.9 | 14.8 | 9.5 | 28.7 | 14.7 | 77.0 | 34.4 |
| | 10 | 9.2 | 2.6 | 15.2 | 6.4 | 8.7 | 5.0 | 20.8 | 7.5 | 53.8 | 18.3 |
| | 11 | 10.8 | 3.8 | 19.5 | 8.9 | 7.2 | 3.5 | 18.4 | 7.9 | 55.9 | 20.3 |
| | 12 | 13.9 | 5.3 | 26.9 | 10.2 | 8.2 | 3.6 | 18.6 | 9.7 | 67.6 | 25.5 |
| | 13 | 12.3 | 4.9 | 24.8 | 9.4 | 6.6 | 4.9 | 0.0 | 0.0 | 41.4 | 18.0 |
| | 14 | 13.8 | 5.8 | 22.5 | 8.7 | 6.5 | 2.7 | 15.5 | 7.0 | 58.2 | 21.8 |
| | 15 | 11.0 | 5.2 | 19.8 | 9.2 | 6.4 | 2.9 | 15.1 | 21.0 | 52.3 | 28.0 |
| | 16 | 9.0 | 4.6 | 17.7 | 7.7 | 6.1 | 3.0 | 17.8 | 9.9 | 50.7 | 21.4 |
| | 17 | 5.2 | 3.4 | 15.6 | 10.8 | 3.5 | 2.2 | 11.8 | 7.8 | 37.9 | 21.4 |
| | 18 | 2.8 | 2.5 | 6.0 | 4.3 | 2.0 | 1.7 | 6.6 | 7.3 | 17.4 | 14.6 |
| | 19 | 0.1 | 0.3 | 1.6 | 2.7 | 0.5 | 0.7 | 4.7 | 4.3 | 4.6 | 6.5 |
| | 20 | 0.0 | 0.0 | 0.3 | 0.8 | 0.0 | 0.0 | 0.8 | 1.6 | 0.5 | 1.4 |
| | All | 192.9 | 65.0 | 322.8 | 110.8 | 180.9 | 80.5 | 215.0 | 57.7 | 934.6 | 316.1 |
| 139 | 1 | 16.8 | 4.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 16.8 | 4.1 |
| | 2 | 9.7 | 2.9 | 4.0 | 7.9 | 2.4 | 4.6 | 4.0 | 6.3 | 20.1 | 18.6 |
| | 3 | 6.9 | 1.8 | 7.5 | 9.2 | 16.1 | 20.3 | 17.0 | 26.5 | 47.4 | 48.6 |
| | 4 | 11.2 | 4.0 | 8.2 | 10.6 | 20.2 | 29.5 | 15.0 | 11.3 | 54.7 | 45.6 |
| | 5 | 5.2 | 6.1 | 2.9 | 5.3 | 3.0 | 3.7 | 10.1 | 10.5 | 21.3 | 17.4 |
| | 6 | 5.2 | 3.4 | 11.8 | 11.2 | 7.4 | 7.7 | 17.4 | 13.5 | 40.4 | 29.5 |
| | 7 | 8.7 | 5.9 | 20.2 | 12.2 | 12.6 | 7.0 | 26.3 | 13.3 | 67.7 | 28.6 |
| | 8 | 3.7 | 4.0 | 13.7 | 6.0 | 10.1 | 4.9 | 27.1 | 9.3 | 54.6 | 18.8 |
| | 9 | 8.7 | 3.0 | 11.8 | 6.7 | 9.4 | 6.5 | 30.0 | 12.9 | 59.8 | 22.1 |
| | 10 | 11.1 | 3.9 | 6.4 | 4.2 | 5.3 | 3.9 | 20.5 | 10.0 | 43.2 | 10.9 |
| | 11 | 8.3 | 2.8 | 10.2 | 6.7 | 5.0 | 3.1 | 18.3 | 6.6 | 41.8 | 10.2 |
| | 12 | 6.2 | 4.3 | 19.2 | 9.3 | 6.5 | 1.4 | 19.8 | 6.3 | 51.6 | 14.1 |
| | 13 | 7.4 | 4.9 | 20.5 | 14.5 | 5.1 | 3.7 | 21.7 | 7.2 | 54.7 | 24.1 |
| | 14 | 11.6 | 8.4 | 22.9 | 5.4 | 4.6 | 1.0 | 17.9 | 13.2 | 57.0 | 15.5 |
| | 15 | 0.0 | 0.0 | 14.6 | 4.7 | 4.4 | 1.5 | 20.6 | 6.3 | 39.6 | 9.6 |
| | 16 | 5.7 | 4.8 | 9.6 | 3.6 | 2.9 | 1.4 | 17.5 | 8.9 | 35.7 | 15.2 |
| | 17 | 2.7 | 3.4 | 8.0 | 4.0 | 2.2 | 1.4 | 12.1 | 7.1 | 24.9 | 11.9 |
| | 18 | 0.2 | 0.4 | 4.2 | 3.7 | 1.4 | 1.5 | 6.2 | 6.1 | 11.9 | 10.0 |
| | 19 | 0.3 | 0.4 | 2.1 | 2.9 | 0.0 | 0.0 | 5.0 | 7.9 | 7.3 | 10.6 |
| | All | 129.3 | 35.8 | 197.6 | 39.1 | 117.1 | 43.8 | 306.5 | 90.0 | 750.6 | 148.2 |
| 149 | 1 | 14.5 | 4.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14.5 | 4.4 |
| | 2 | 8.6 | 2.1 | 0.0 | 0.0 | 2.6 | 4.9 | 6.7 | 13.5 | 18.0 | 18.2 |
| | 3 | 6.8 | 1.3 | 0.1 | 0.3 | 2.2 | 3.8 | 11.4 | 13.7 | 17.6 | 14.8 |
| | 4 | 8.0 | 1.7 | 0.6 | 1.1 | 4.9 | 4.2 | 0.0 | 0.0 | 13.5 | 5.8 |
| | 5 | 8.6 | 2.0 | 0.5 | 1.0 | 2.6 | 2.2 | 11.0 | 10.7 | 22.8 | 13.0 |
| | 6 | 10.2 | 2.8 | 0.5 | 1.1 | 4.0 | 2.2 | 23.9 | 15.2 | 38.6 | 16.8 |
| | 7 | 10.7 | 2.5 | 1.0 | 1.2 | 8.6 | 2.1 | 43.8 | 19.9 | 64.1 | 21.8 |
| | 8 | 4.4 | 2.9 | 0.8 | 0.9 | 6.7 | 3.0 | 0.0 | 0.0 | 11.9 | 3.2 |
| | 9 | 5.8 | 1.2 | 0.3 | 0.6 | 5.8 | 5.2 | 47.4 | 14.7 | 59.2 | 19.9 |
| | 10 | 7.1 | 1.6 | 0.5 | 0.9 | 2.5 | 1.8 | 36.3 | 14.7 | 46.4 | 17.1 |
| | 11 | 8.0 | 1.9 | 0.3 | 0.4 | 1.3 | 0.5 | 32.8 | 8.0 | 42.3 | 9.4 |
| | 12 | 7.3 | 1.7 | 0.3 | 0.6 | 1.3 | 1.1 | 29.0 | 7.3 | 37.9 | 8.5 |
| | 13 | 6.5 | 1.9 | 0.1 | 0.3 | 1.2 | 0.8 | 0.0 | 0.0 | 7.7 | 2.1 |
| | 14 | 4.6 | 1.2 | 0.1 | 0.2 | 1.4 | 0.8 | 29.5 | 8.4 | 35.6 | 9.3 |
| | 15 | 3.6 | 1.1 | 0.0 | 0.0 | 1.0 | 1.0 | 24.0 | 9.5 | 28.6 | 10.7 |
| | 16 | 3.1 | 1.0 | 0.2 | 0.5 | 0.7 | 0.9 | 20.0 | 10.6 | 24.0 | 11.4 |
| | 17 | 1.7 | 0.9 | 0.0 | 0.0 | 0.3 | 0.4 | 11.9 | 6.0 | 13.8 | 6.6 |
| | 18 | 1.0 | 0.8 | 0.0 | 0.0 | 0.2 | 0.4 | 8.2 | 7.1 | 9.3 | 7.7 |
| | 19 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 1.7 | 2.8 | 1.8 | 3.0 |
| | 20 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 3.4 | 0.9 | 3.4 |
| | All | 120.6 | 23.2 | 5.4 | 3.6 | 47.0 | 13.6 | 335.5 | 35.9 | 508.5 | 63.5 |

TABLE 9. Aerial zinc accumulation means and standard deviations for each day after planting (DAP), node, and plant part. Values are in g/ha, and planting date was 143 (23 May).

| | | ---Stems--- | | ---Leaves--- | | --Petioles-- | | ----Pods---- | | ---Totals--- | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| DAP | Node | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev | Mean | Sdev |
| 44 | 1 | 1.43 | 0.75 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.43 | 0.75 |
| | 2 | 0.75 | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.75 | 0.24 |
| | 3 | 0.68 | 0.19 | 0.69 | 0.48 | 0.43 | 0.52 | 0.00 | 0.00 | 1.79 | 0.98 |
| | 4 | 1.03 | 0.37 | 4.08 | 1.75 | 0.99 | 0.40 | 0.00 | 0.00 | 6.11 | 2.31 |
| | 5 | 1.17 | 0.40 | 4.98 | 2.33 | 1.17 | 0.50 | 0.00 | 0.00 | 7.32 | 2.96 |
| | 6 | 0.96 | 0.37 | 5.38 | 2.39 | 1.11 | 0.48 | 0.00 | 0.00 | 7.46 | 3.14 |
| | 7 | 0.70 | 0.37 | 3.43 | 1.79 | 0.81 | 0.46 | 0.00 | 0.00 | 4.94 | 2.29 |
| | 8 | 0.34 | 0.50 | 1.17 | 1.61 | 0.24 | 0.35 | 0.00 | 0.00 | 1.75 | 2.29 |
| | 9 | 0.00 | 0.00 | 0.11 | 0.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.30 |
| | All | 7.06 | 2.59 | 19.84 | 8.01 | 4.76 | 1.86 | 0.00 | 0.00 | 31.65 | 11.93 |
| 57 | 1 | 1.25 | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.25 | 0.40 |
| | 2 | 0.84 | 0.24 | 0.24 | 0.61 | 0.11 | 0.28 | 0.00 | 0.00 | 1.20 | 0.86 |
| | 3 | 0.67 | 0.18 | 1.24 | 0.83 | 0.73 | 0.60 | 0.00 | 0.00 | 2.63 | 1.56 |
| | 4 | 0.99 | 0.24 | 1.71 | 1.02 | 0.82 | 0.46 | 0.00 | 0.00 | 3.52 | 1.39 |
| | 5 | 1.14 | 0.25 | 4.40 | 1.54 | 1.45 | 0.41 | 0.00 | 0.00 | 7.00 | 1.79 |
| | 6 | 1.52 | 0.89 | 6.68 | 1.32 | 1.69 | 0.41 | 0.00 | 0.00 | 9.89 | 1.90 |
| | 7 | 1.34 | 0.35 | 14.15 | 21.05 | 2.17 | 0.86 | 0.00 | 0.00 | 17.66 | 21.50 |
| | 8 | 1.28 | 0.30 | 9.39 | 2.19 | 2.08 | 0.62 | 0.00 | 0.00 | 12.75 | 3.02 |
| | 9 | 1.09 | 0.36 | 7.40 | 2.54 | 1.52 | 0.61 | 0.00 | 0.00 | 10.01 | 3.48 |
| | 10 | 0.70 | 0.43 | 4.72 | 2.41 | 0.83 | 0.67 | 0.00 | 0.00 | 5.66 | 3.81 |
| | 11 | 0.26 | 0.28 | 1.11 | 1.53 | 0.20 | 0.29 | 0.00 | 0.00 | 1.47 | 1.91 |
| | 12 | 0.04 | 0.11 | 0.12 | 0.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 0.42 |
| | All | 11.02 | 2.88 | 50.58 | 25.12 | 11.60 | 3.76 | 0.00 | 0.00 | 73.53 | 29.59 |
| 70 | 1 | 1.58 | 0.64 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.58 | 0.64 |
| | 2 | 1.21 | 0.36 | 2.70 | 4.07 | 1.32 | 2.09 | 0.00 | 0.00 | 4.23 | 5.67 |
| | 3 | 0.85 | 0.45 | 3.44 | 3.77 | 1.60 | 1.76 | 0.00 | 0.00 | 5.89 | 5.67 |
| | 4 | 1.18 | 0.36 | 2.81 | 2.71 | 1.46 | 1.41 | 0.00 | 0.00 | 5.45 | 4.27 |
| | 5 | 1.41 | 0.37 | 2.82 | 2.45 | 1.66 | 1.20 | 0.00 | 0.00 | 5.69 | 3.69 |
| | 6 | 1.40 | 0.48 | 2.01 | 1.80 | 1.09 | 0.79 | 0.00 | 0.00 | 4.50 | 2.59 |
| | 7 | 1.34 | 0.30 | 3.57 | 2.07 | 1.89 | 1.02 | 0.00 | 0.00 | 6.80 | 2.97 |
| | 8 | 1.58 | 0.41 | 9.33 | 5.00 | 3.08 | 1.27 | 0.00 | 0.00 | 14.00 | 6.22 |
| | 9 | 1.42 | 0.58 | 9.19 | 4.71 | 2.18 | 0.75 | 0.00 | 0.00 | 12.79 | 4.90 |
| | 10 | 1.47 | 0.40 | 10.97 | 3.95 | 1.74 | 0.51 | 0.00 | 0.00 | 14.18 | 4.64 |
| | 11 | 1.68 | 0.53 | 11.31 | 2.97 | 1.78 | 0.46 | 0.00 | 0.00 | 14.77 | 3.86 |
| | 12 | 1.57 | 0.74 | 11.06 | 4.54 | 1.89 | 0.60 | 0.00 | 0.00 | 14.52 | 5.70 |
| | 13 | 1.15 | 0.60 | 8.26 | 3.90 | 1.26 | 0.68 | 0.00 | 0.00 | 10.66 | 4.61 |
| | 14 | 0.66 | 0.37 | 5.32 | 3.15 | 1.14 | 0.71 | 0.00 | 0.00 | 6.79 | 4.38 |
| | 15 | 0.16 | 0.24 | 1.04 | 1.62 | 0.23 | 0.35 | 0.00 | 0.00 | 1.42 | 2.22 |
| | 16 | 0.00 | 0.00 | 0.11 | 0.43 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.43 |
| | All | 18.67 | 5.48 | 82.92 | 24.85 | 21.78 | 6.52 | 0.00 | 0.00 | 123.38 | 35.74 |
| 79 | 1 | 2.84 | 0.69 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.84 | 0.69 |
| | 2 | 1.74 | 0.29 | 1.02 | 2.62 | 0.32 | 0.81 | 0.00 | 0.00 | 3.08 | 3.38 |
| | 3 | 1.60 | 0.67 | 3.65 | 5.26 | 2.36 | 3.13 | 0.00 | 0.00 | 7.61 | 8.59 |
| | 4 | 1.84 | 0.23 | 4.27 | 5.59 | 3.00 | 3.59 | 0.00 | 0.00 | 9.11 | 9.24 |
| | 5 | 2.16 | 0.39 | 2.56 | 2.35 | 2.36 | 2.28 | 0.00 | 0.00 | 7.08 | 4.73 |
| | 6 | 2.12 | 0.54 | 2.51 | 1.78 | 2.18 | 1.52 | 0.00 | 0.00 | 6.81 | 3.38 |
| | 7 | 1.91 | 0.38 | 7.24 | 2.23 | 5.30 | 1.49 | 0.00 | 0.00 | 14.46 | 3.64 |
| | 8 | 2.43 | 0.36 | 7.29 | 3.74 | 4.59 | 2.16 | 0.00 | 0.00 | 14.30 | 5.79 |
| | 9 | 2.25 | 0.77 | 10.04 | 3.63 | 3.51 | 1.15 | 0.00 | 0.00 | 15.80 | 4.52 |
| | 10 | 2.25 | 0.38 | 13.79 | 3.12 | 3.18 | 0.83 | 0.00 | 0.00 | 19.22 | 3.99 |
| | 11 | 2.26 | 0.33 | 13.32 | 1.89 | 2.32 | 0.55 | 0.00 | 0.00 | 17.91 | 2.23 |
| | 12 | 1.99 | 0.31 | 11.24 | 1.71 | 2.20 | 0.62 | 0.00 | 0.00 | 15.43 | 2.15 |
| | 13 | 1.62 | 0.71 | 9.51 | 1.75 | 2.09 | 0.46 | 0.00 | 0.00 | 13.22 | 2.43 |
| | 14 | 1.03 | 0.40 | 7.35 | 2.27 | 1.64 | 0.65 | 0.00 | 0.00 | 10.02 | 3.24 |
| | 15 | 0.80 | 0.42 | 5.27 | 2.54 | 1.16 | 0.84 | 0.00 | 0.00 | 6.90 | 3.96 |
| | 16 | 0.48 | 0.37 | 2.86 | 2.21 | 0.58 | 0.55 | 0.00 | 0.00 | 3.44 | 3.16 |
| | 17 | 0.17 | 0.27 | 0.84 | 1.27 | 0.18 | 0.33 | 0.00 | 0.00 | 1.19 | 1.85 |
| | 18 | 0.00 | 0.00 | 0.09 | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.36 |
| | All | 29.43 | 3.82 | 102.18 | 19.99 | 36.90 | 9.58 | 0.00 | 0.00 | 168.51 | 31.39 |

(cont'd)

TABLE 9. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 90 | 1 | 1.96 | 0.56 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.84 | 0.73 |
| | 2 | 1.71 | 0.32 | 3.69 | 4.24 | 2.15 | 2.23 | 0.11 | 0.16 | 6.72 | 6.37 |
| | 3 | 1.40 | 0.34 | 13.24 | 10.68 | 7.64 | 5.09 | 0.38 | 0.42 | 19.93 | 16.77 |
| | 4 | 1.53 | 0.43 | 9.75 | 8.06 | 4.29 | 3.67 | 0.28 | 0.27 | 13.99 | 11.42 |
| | 5 | 1.75 | 0.50 | 5.65 | 4.53 | 4.39 | 5.08 | 0.20 | 0.19 | 9.99 | 9.82 |
| | 6 | 2.17 | 1.09 | 3.45 | 2.22 | 2.55 | 1.34 | 0.21 | 0.11 | 7.86 | 4.12 |
| | 7 | 1.84 | 0.77 | 7.78 | 2.67 | 5.61 | 1.26 | 0.45 | 0.18 | 14.69 | 5.53 |
| | 8 | 2.54 | 2.71 | 7.92 | 3.76 | 4.99 | 2.57 | 0.52 | 0.16 | 14.97 | 8.06 |
| | 9 | 1.93 | 0.39 | 6.55 | 2.71 | 3.92 | 1.66 | 0.43 | 0.20 | 12.04 | 5.19 |
| | 10 | 2.59 | 2.10 | 7.66 | 4.32 | 3.24 | 1.43 | 0.32 | 0.10 | 12.95 | 6.44 |
| | 11 | 2.30 | 0.71 | 11.77 | 3.16 | 3.82 | 1.21 | 0.31 | 0.09 | 17.07 | 6.31 |
| | 12 | 2.06 | 0.55 | 12.50 | 3.43 | 4.00 | 1.11 | 0.34 | 0.12 | 17.71 | 6.58 |
| | 13 | 1.84 | 0.42 | 10.48 | 2.50 | 3.32 | 0.75 | 0.30 | 0.10 | 14.94 | 5.09 |
| | 14 | 1.55 | 0.41 | 9.89 | 3.75 | 2.72 | 1.04 | 0.32 | 0.13 | 13.58 | 5.99 |
| | 15 | 1.36 | 0.43 | 7.71 | 2.69 | 2.36 | 0.80 | 0.33 | 0.12 | 11.02 | 4.72 |
| | 16 | 0.74 | 0.37 | 4.87 | 3.04 | 1.52 | 0.76 | 0.23 | 0.09 | 6.91 | 4.43 |
| | 17 | 0.70 | 0.74 | 2.83 | 1.83 | 1.41 | 1.28 | 0.13 | 0.10 | 4.75 | 3.35 |
| | 18 | 0.25 | 0.20 | 1.23 | 0.91 | 0.44 | 0.29 | 0.09 | 0.09 | 1.89 | 1.43 |
| | 19 | 0.04 | 0.06 | 0.27 | 0.41 | 0.08 | 0.12 | 0.00 | 0.00 | 0.37 | 0.57 |
| | 20 | 0.00 | 0.00 | 0.07 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.19 |
| | All | 30.26 | 7.21 | 124.54 | 27.79 | 57.09 | 14.46 | 4.94 | 1.30 | 203.28 | 70.43 |
| 100 | 1 | 1.27 | 0.59 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.27 | 0.59 |
| | 2 | 1.85 | 1.14 | 0.91 | 1.64 | 0.59 | 1.19 | 0.14 | 0.28 | 3.48 | 3.39 |
| | 3 | 2.86 | 0.55 | 4.48 | 4.81 | 2.54 | 2.43 | 0.54 | 0.71 | 10.43 | 7.76 |
| | 4 | 4.08 | 1.08 | 9.73 | 6.63 | 4.52 | 2.94 | 0.89 | 0.66 | 19.21 | 10.26 |
| | 5 | 4.04 | 1.44 | 3.47 | 4.23 | 1.76 | 2.14 | 0.54 | 0.68 | 9.80 | 7.15 |
| | 6 | 2.35 | 0.90 | 7.49 | 5.57 | 3.58 | 2.31 | 0.83 | 0.55 | 14.25 | 8.16 |
| | 7 | 3.00 | 2.83 | 10.69 | 4.85 | 5.74 | 2.65 | 1.20 | 0.67 | 20.64 | 7.88 |
| | 8 | 2.97 | 1.62 | 10.64 | 4.85 | 5.92 | 3.06 | 1.69 | 0.74 | 21.21 | 8.97 |
| | 9 | 2.32 | 0.65 | 10.21 | 3.93 | 5.20 | 2.86 | 1.73 | 0.66 | 19.46 | 7.45 |
| | 10 | 2.61 | 0.76 | 9.91 | 2.83 | 3.70 | 1.60 | 1.45 | 0.65 | 17.67 | 4.50 |
| | 11 | 2.68 | 0.70 | 13.79 | 4.23 | 3.00 | 0.97 | 1.22 | 0.36 | 20.69 | 5.41 |
| | 12 | 2.09 | 0.64 | 14.14 | 3.25 | 3.26 | 0.79 | 1.51 | 0.68 | 21.01 | 4.63 |
| | 13 | 2.28 | 1.13 | 13.07 | 3.18 | 3.35 | 1.21 | 1.59 | 0.63 | 20.29 | 4.17 |
| | 14 | 1.69 | 0.55 | 11.70 | 3.33 | 2.47 | 0.72 | 1.86 | 0.61 | 17.72 | 4.62 |
| | 15 | 1.45 | 0.53 | 8.28 | 2.65 | 1.68 | 0.58 | 1.65 | 0.62 | 13.06 | 3.71 |
| | 16 | 0.96 | 0.48 | 6.32 | 2.81 | 1.26 | 0.59 | 1.36 | 0.56 | 9.91 | 3.87 |
| | 17 | 0.68 | 0.29 | 5.07 | 2.05 | 0.99 | 0.48 | 0.95 | 0.58 | 7.70 | 3.16 |
| | 18 | 0.40 | 0.26 | 2.91 | 2.03 | 0.61 | 0.48 | 0.65 | 0.55 | 4.57 | 2.94 |
| | 19 | 0.12 | 0.18 | 1.06 | 1.32 | 0.17 | 0.21 | 0.23 | 0.36 | 1.58 | 1.88 |
| | 20 | 0.00 | 0.00 | 0.24 | 0.45 | 0.03 | 0.07 | 0.08 | 0.17 | 0.35 | 0.64 |
| | All | 39.71 | 10.03 | 144.10 | 28.98 | 50.36 | 14.44 | 20.13 | 5.04 | 254.30 | 52.50 |
| 113 | 1 | 2.86 | 1.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.86 | 1.17 |
| | 2 | 1.76 | 0.35 | 1.71 | 2.31 | 1.48 | 1.91 | 1.19 | 1.67 | 5.04 | 5.44 |
| | 3 | 1.42 | 0.33 | 2.27 | 3.33 | 1.89 | 2.46 | 1.30 | 2.25 | 6.88 | 7.97 |
| | 4 | 1.63 | 0.39 | 5.39 | 7.41 | 3.70 | 5.18 | 3.47 | 5.02 | 14.19 | 17.51 |
| | 5 | 2.01 | 0.50 | 5.62 | 6.77 | 4.02 | 4.52 | 3.83 | 3.71 | 15.48 | 14.78 |
| | 6 | 2.17 | 0.69 | 6.82 | 6.22 | 5.32 | 4.44 | 4.72 | 4.27 | 19.04 | 15.01 |
| | 7 | 2.08 | 0.59 | 9.80 | 4.46 | 6.48 | 2.93 | 6.17 | 3.04 | 24.53 | 10.25 |
| | 8 | 2.04 | 0.46 | 7.47 | 2.22 | 4.93 | 1.71 | 6.30 | 2.48 | 20.75 | 5.54 |
| | 9 | 2.25 | 0.47 | 5.62 | 4.33 | 3.61 | 2.78 | 5.27 | 2.80 | 16.74 | 9.79 |
| | 10 | 3.06 | 1.31 | 6.08 | 3.15 | 2.09 | 0.87 | 4.35 | 1.58 | 15.59 | 4.19 |
| | 11 | 2.88 | 0.54 | 12.25 | 3.89 | 2.59 | 0.61 | 4.90 | 1.58 | 22.62 | 5.31 |
| | 12 | 2.54 | 0.45 | 15.50 | 2.39 | 2.53 | 0.44 | 5.39 | 1.58 | 25.96 | 3.60 |
| | 13 | 2.39 | 0.81 | 13.52 | 3.23 | 2.42 | 0.78 | 4.41 | 1.75 | 22.75 | 5.00 |
| | 14 | 1.44 | 0.37 | 11.49 | 2.96 | 1.86 | 0.53 | 5.02 | 1.47 | 19.81 | 4.26 |
| | 15 | 1.19 | 0.25 | 8.91 | 3.51 | 1.40 | 0.51 | 4.96 | 1.80 | 16.45 | 4.56 |
| | 16 | 0.89 | 0.31 | 6.80 | 2.30 | 1.01 | 0.36 | 3.17 | 1.75 | 11.87 | 3.52 |
| | 17 | 0.57 | 0.25 | 4.58 | 2.17 | 0.67 | 0.35 | 2.25 | 0.95 | 8.07 | 3.36 |
| | 18 | 0.19 | 0.25 | 1.93 | 2.28 | 0.26 | 0.34 | 1.30 | 1.62 | 3.68 | 4.12 |
| | 19 | 0.04 | 0.10 | 0.27 | 0.53 | 0.03 | 0.07 | 0.21 | 0.66 | 0.55 | 1.22 |
| | All | 33.38 | 6.58 | 125.62 | 29.51 | 45.93 | 15.69 | 67.92 | 22.44 | 272.86 | 67.69 |

TABLE 9. (cont'd)

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 127 | 1 | 3.09 | 1.45 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 3.09 | 1.45 |
| | 2 | 2.35 | 0.62 | 1.76 | 3.83 | 1.88 | 3.60 | 2.47 | 6.09 | 8.46 | 13.21 |
| | 3 | 1.67 | 0.45 | 4.84 | 5.47 | 9.80 | 17.02 | 4.95 | 5.33 | 21.27 | 25.49 |
| | 4 | 12.56 | 21.19 | 8.08 | 6.28 | 5.88 | 4.98 | 0.00 | 0.00 | 26.53 | 28.06 |
| | 5 | 2.58 | 0.76 | 3.60 | 6.26 | 1.95 | 3.33 | 3.64 | 4.48 | 11.77 | 14.07 |
| | 6 | 3.04 | 1.13 | 6.34 | 4.91 | 3.56 | 2.89 | 7.51 | 4.57 | 21.09 | 12.79 |
| | 7 | 3.68 | 2.33 | 10.28 | 4.89 | 5.72 | 2.23 | 11.63 | 4.73 | 27.82 | 12.21 |
| | 8 | 8.64 | 10.73 | 9.96 | 4.47 | 5.67 | 2.77 | 0.00 | 0.00 | 24.27 | 12.07 |
| | 9 | 14.72 | 23.62 | 7.38 | 3.51 | 4.28 | 2.71 | 12.79 | 6.75 | 39.18 | 28.83 |
| | 10 | 1.82 | 1.27 | 5.65 | 2.32 | 2.83 | 1.62 | 10.13 | 4.14 | 20.44 | 7.12 |
| | 11 | 2.52 | 0.81 | 8.26 | 3.55 | 2.56 | 1.18 | 8.14 | 3.57 | 21.48 | 7.97 |
| | 12 | 2.35 | 0.92 | 11.84 | 4.63 | 3.06 | 1.24 | 8.84 | 3.97 | 26.09 | 9.57 |
| | 13 | 2.13 | 0.89 | 12.81 | 4.95 | 2.10 | 1.56 | 0.00 | 0.00 | 16.64 | 6.68 |
| | 14 | 1.65 | 0.71 | 15.46 | 15.11 | 2.17 | 0.92 | 8.74 | 3.52 | 28.03 | 17.79 |
| | 15 | 1.31 | 0.60 | 7.28 | 3.22 | 1.77 | 0.82 | 8.37 | 4.37 | 18.73 | 8.25 |
| | 16 | 0.98 | 0.49 | 6.05 | 2.96 | 1.36 | 0.65 | 7.60 | 4.21 | 16.00 | 6.95 |
| | 17 | 0.64 | 0.40 | 4.65 | 2.91 | 0.86 | 0.58 | 5.73 | 3.71 | 12.26 | 6.42 |
| | 18 | 0.34 | 0.30 | 2.09 | 1.60 | 0.42 | 0.34 | 3.65 | 2.77 | 6.50 | 4.62 |
| | 19 | 0.11 | 0.16 | 0.48 | 0.85 | 0.12 | 0.19 | 2.09 | 1.83 | 1.77 | 2.51 |
| | 20 | 0.00 | 0.00 | 0.13 | 0.29 | 0.00 | 0.00 | 0.30 | 0.60 | 0.20 | 0.55 |
| | All | 65.65 | 29.50 | 125.55 | 42.70 | 56.01 | 30.52 | 105.33 | 30.09 | 359.97 | 119.61 |
| 139 | 1 | 6.43 | 1.90 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 6.43 | 1.90 |
| | 2 | 4.12 | 1.05 | 0.66 | 1.23 | 0.65 | 1.04 | 1.87 | 2.98 | 7.30 | 5.36 |
| | 3 | 3.25 | 0.98 | 3.66 | 4.83 | 4.17 | 3.85 | 8.56 | 13.30 | 19.64 | 21.22 |
| | 4 | 4.42 | 1.01 | 3.34 | 3.81 | 2.93 | 2.49 | 7.37 | 5.89 | 18.07 | 11.84 |
| | 5 | 4.76 | 3.57 | 1.17 | 1.99 | 4.51 | 8.10 | 5.46 | 5.53 | 15.90 | 15.29 |
| | 6 | 4.98 | 1.31 | 2.78 | 2.75 | 3.10 | 3.11 | 10.71 | 10.26 | 20.99 | 15.39 |
| | 7 | 4.93 | 1.70 | 4.67 | 2.18 | 4.99 | 2.93 | 22.98 | 14.65 | 37.57 | 16.72 |
| | 8 | 5.98 | 2.35 | 4.66 | 2.10 | 3.94 | 1.97 | 16.60 | 5.98 | 31.18 | 9.87 |
| | 9 | 16.71 | 15.03 | 3.66 | 2.35 | 2.88 | 1.98 | 17.85 | 8.12 | 41.10 | 17.89 |
| | 10 | 2.52 | 2.70 | 2.37 | 1.82 | 1.87 | 1.50 | 12.16 | 6.41 | 18.92 | 9.50 |
| | 11 | 0.78 | 1.43 | 3.60 | 2.62 | 1.60 | 0.79 | 10.31 | 3.81 | 16.29 | 5.59 |
| | 12 | 1.30 | 1.38 | 6.61 | 3.62 | 2.26 | 0.88 | 11.44 | 3.72 | 21.61 | 7.21 |
| | 13 | 4.39 | 4.01 | 8.07 | 2.20 | 2.37 | 0.68 | 12.70 | 4.19 | 27.54 | 6.61 |
| | 14 | 2.12 | 0.84 | 7.97 | 2.59 | 1.94 | 0.33 | 12.43 | 4.94 | 24.47 | 6.46 |
| | 15 | 1.45 | 0.60 | 3.35 | 2.38 | 1.43 | 0.46 | 11.31 | 3.66 | 17.53 | 4.64 |
| | 16 | 0.77 | 0.39 | 2.95 | 1.24 | 1.02 | 0.53 | 9.87 | 4.96 | 14.61 | 6.06 |
| | 17 | 0.63 | 0.51 | 2.17 | 0.92 | 0.63 | 0.36 | 6.83 | 4.23 | 10.25 | 5.02 |
| | 18 | 0.28 | 0.35 | 1.03 | 0.80 | 0.35 | 0.34 | 3.58 | 3.55 | 5.24 | 4.69 |
| | 19 | 0.08 | 0.12 | 0.42 | 0.56 | 0.10 | 0.15 | 2.30 | 3.58 | 2.86 | 4.23 |
| | All | 69.85 | 20.77 | 63.14 | 15.66 | 40.17 | 13.65 | 184.33 | 44.24 | 357.49 | 65.96 |
| 149 | 1 | 4.72 | 1.69 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 4.72 | 1.69 |
| | 2 | 3.99 | 0.87 | 0.00 | 0.00 | 1.28 | 2.46 | 7.01 | 14.72 | 12.29 | 17.21 |
| | 3 | 2.56 | 0.49 | 0.02 | 0.05 | 2.57 | 4.98 | 3.49 | 6.91 | 7.76 | 10.86 |
| | 4 | 4.07 | 1.05 | 0.15 | 0.29 | 3.25 | 2.88 | 0.00 | 0.00 | 7.46 | 3.65 |
| | 5 | 5.08 | 2.44 | 0.19 | 0.34 | 1.76 | 1.59 | 5.83 | 5.71 | 12.86 | 8.84 |
| | 6 | 4.63 | 2.78 | 0.16 | 0.36 | 2.67 | 1.32 | 10.11 | 5.65 | 17.57 | 7.94 |
| | 7 | 4.36 | 2.70 | 0.27 | 0.33 | 6.29 | 2.73 | 22.24 | 10.12 | 33.16 | 11.26 |
| | 8 | 8.19 | 5.57 | 0.42 | 0.49 | 6.42 | 3.53 | 0.00 | 0.00 | 15.03 | 8.36 |
| | 9 | 4.42 | 4.17 | 0.12 | 0.23 | 4.24 | 2.30 | 25.56 | 10.02 | 34.33 | 11.24 |
| | 10 | 2.46 | 1.75 | 0.19 | 0.33 | 1.83 | 1.74 | 18.25 | 8.62 | 22.74 | 11.17 |
| | 11 | 3.18 | 0.92 | 0.11 | 0.16 | 1.16 | 1.13 | 19.77 | 5.06 | 24.21 | 6.05 |
| | 12 | 2.48 | 0.57 | 0.07 | 0.12 | 1.58 | 1.60 | 19.31 | 5.93 | 23.44 | 7.58 |
| | 13 | 3.25 | 1.42 | 0.09 | 0.20 | 1.76 | 2.66 | 0.00 | 0.00 | 5.10 | 2.70 |
| | 14 | 2.08 | 0.75 | 0.05 | 0.17 | 0.92 | 0.58 | 23.62 | 10.43 | 26.67 | 11.28 |
| | 15 | 1.60 | 0.52 | 0.00 | 0.00 | 0.73 | 0.44 | 28.93 | 19.33 | 31.26 | 19.91 |
| | 16 | 1.19 | 0.51 | 0.07 | 0.18 | 0.36 | 0.45 | 28.29 | 35.14 | 29.91 | 35.49 |
| | 17 | 0.62 | 0.32 | 0.00 | 0.00 | 0.25 | 0.34 | 7.99 | 4.24 | 8.86 | 4.56 |
| | 18 | 0.42 | 0.41 | 0.00 | 0.00 | 0.08 | 0.21 | 5.25 | 4.30 | 5.74 | 4.59 |
| | 19 | 0.11 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 1.14 | 1.91 | 1.26 | 2.04 |
| | 20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.45 | 1.82 | 0.45 | 1.82 |
| | All | 59.42 | 16.48 | 1.93 | 1.26 | 37.13 | 11.16 | 226.36 | 55.50 | 324.83 | 67.30 |

## SUMMARY

Independent validation of process-based simulation models requires extensive data sets that are often very costly to obtain. This paper provides an extensive dry matter and nutrient accumulation data set (also available in machine format) for a maturity Group VII, determinate soybean ('Bragg') grown on a Goldsboro loamy sand in the South Carolina Coastal Plain.


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