

# Michigan State University

## 1996 Turfgrass Fertility Study



TABLE 3. Clipping Weight from Karsten Tissue Analysis

Clipping weights in grams

| Carrier                  | Rate & Timing        | June 24        | July 1        | July 8         | July 22        | July 29        | Season Avg. |
|--------------------------|----------------------|----------------|---------------|----------------|----------------|----------------|-------------|
| 130 A                    | 0.25 lbs./wk.        | 28.9 de        | 14.9 c        | 07.3 d         | 18.2 bcd       | 16.4 bcd       | 17.1        |
| <b>131 A<sup>1</sup></b> | <b>0.19 lbs./wk.</b> | <b>36.7 ab</b> | <b>20.9 a</b> | <b>11.0 b</b>  | <b>36.7 a</b>  | <b>24.4 a</b>  | <b>25.9</b> |
| 134 A                    | 0.16 lbs./wk.        | 26.2 e         | 13.5 c        | 05.3 e         | 15.5 de        | 13.9 de        | 14.9        |
| <b>135 A<sup>1</sup></b> | <b>0.12 lbs./wk.</b> | <b>30.2 d</b>  | <b>14.5 c</b> | <b>07.2 d</b>  | <b>19.0 bc</b> | <b>17.3 bc</b> | <b>17.6</b> |
| 130 A                    | 1.0 lb./mo.          | 33.4 c         | 14.3 c        | 09.5 c         | 19.5 cd        | 15.8 cd        | 18.5        |
| <b>131 A<sup>1</sup></b> | <b>0.75 lbs./mo.</b> | <b>38.7 a</b>  | <b>18.4 b</b> | <b>14.4 a</b>  | <b>29.7 b</b>  | <b>18.9 b</b>  | <b>24.0</b> |
| 134 A                    | 0.62 lbs./mo.        | 28.9 de        | 13.8 c        | 07.6 d         | 14.5 e         | 12.5 e         | 15.5        |
| <b>135 A<sup>1</sup></b> | <b>0.47 lbs./mo.</b> | <b>34.7 be</b> | <b>15.7 c</b> | <b>10.6 bc</b> | <b>21.5 cd</b> | <b>16.0 cd</b> | <b>19.7</b> |
| Probabiliity             |                      | .00            | .00           | .00            | .00            | .00            |             |
| LSD @ 0.05               |                      | 3.1            | 2.3           | 1.1            | 3.9            | 2.7            |             |

Applicaton Dates for MSU Turfgrass Study

All Treatments

June 3

July 1

August 6

Weekly Feeding Treatments

June 10, June 17, June 25

July 9, July 16, July 22, July 31

August 13, August 21, August 28, September 4

TABLE 4. Nitrogen Content of Clippings from Karsten Tissue Analysis

Nitrogen content in clippings

| Carrier                  | Rate & Timing        | July 1         | July 8        | July 22        | Season Avg. |
|--------------------------|----------------------|----------------|---------------|----------------|-------------|
| 130 A                    | 0.25 lbs./wk.        | 4.25 be        | 4.26 d        | 4.16 bc        | 4.22        |
| <b>131 A<sup>1</sup></b> | <b>0.19 lbs./wk.</b> | <b>4.91 a</b>  | <b>4.71 c</b> | <b>4.78 a</b>  | <b>4.8</b>  |
| 134 A                    | 0.16 lbs./wk.        | 4.07 cd        | 4.36 d        | 3.81 d         | 4.08        |
| <b>135 A<sup>1</sup></b> | <b>0.12 lbs./wk.</b> | <b>4.31 b</b>  | <b>4.15 d</b> | <b>4.14 bc</b> | <b>4.2</b>  |
| 130 A                    | 1.0 lb./mo.          | 3.93 de        | 4.77 bc       | 4.07 c         | 4.25        |
| <b>131 A<sup>1</sup></b> | <b>0.75 lbs./mo.</b> | <b>4.36 b</b>  | <b>5.46 a</b> | <b>4.72 a</b>  | <b>4.85</b> |
| 134 A                    | 0.62 lbs./mo.        | 3.73 e         | 4.28 d        | 3.75 d         | 3.92        |
| <b>135 A<sup>1</sup></b> | <b>0.47 lbs./mo.</b> | <b>4.03 cd</b> | <b>5.02 b</b> | <b>4.27 b</b>  | <b>4.44</b> |
| Probabiliity             |                      | .00            | .00           | .00            | .00         |
| LSD @ 0.05               |                      | .23            | .29           | .17            | .17         |

Applicaton Dates for MSU Turfgrass Study

All Treatments

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Weekly Feeding Treatments

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*Note: Inclusion of Menefee Humate in 131 and 135 consistently increased clipping weight and tissue nitrogen in every observation but one.*

Means in columns followed by the same letter are not significantly different at the 5% level using the LSD means separation test.

<sup>1</sup>Menefee Humate™ added at 27.5% w/w