

# Effect of Menefee Humate on Penneagle Creeping Bentgrass Greens



In Conjunction with Michigan State University  
 A Summary of Benefits to Penneagle Creeping Bentgrass Greens  
 Due to Amendment of Turfgrass Fertilizers with Menefee Humate®  
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Fertilizer studies were conducted at the Hancock Turfgrass Research Center at Michigan State University in 1996 as follow up to the initial studies conducted in 1995. Based on the results from the first study, the '96 protocol also included a premium turfgrassfertilizer as the "control" and included amended treatments with the inclusion of Menefee Humate™. The amended fertilizer blends included a reduced rate of N and K by 28% and a reduced level of P by 20%. Applications were made with all fertilizer blends under study on both a monthly and weekly schedule to determine the most effective treatment schedule.

## CONCLUSION:

**Color Ratings:** Based on a Seasonal Average both weekly and monthly treatments amended with Menefee Humate™ had a statistically significant higher color rating than the standard premium fertilizer. (See Table 1)

**Quality Rating:** This rating considers both density and color. Based on a seasonal average both weekly and monthly treatments amended with Menefee Humate™ had statistically significant higher Quality Rating than the standard premium fertilizer. (See Table 2)

**Clipping Weight:** This rating indicates turfgrassrate of growth and density. Based on a Seasonal Average both weekly and monthly treatments amended with Menefee Humate™ had a statistically significant higher clipping weight than the standard premium fertilizer. (See Table 3)

**Tissue Nitrogen Content:** It is significant that both treatments that included Menefee Humate™ consistently had increased nitrogen content in the tissue from clippings despite a 25% reduction in nitrogen applied on those treatments! (See Table 4)

<u>130A</u> 14-5-14 Appl. rate:	<u>WEEKLY</u> w/micros 1.79 lb/M/wk 0.25 lb N/M/wk	<u>MONTHLY</u>  (7.15 lb/M/mo.) (1.0 lb N/M/mo.)
<u>131A</u> 10-4-10 Appl. rate	<u>WEEKLY</u> amended + Menefee Humate™ at 27.5% w/w 1.875 lb/M/wk 0.19 lb N/M/wk	<u>MONTHLY</u>  (7.5 lb/M/mo.) (0.75 lb N/M/mo.)
<u>134A</u> 14-5-14 Appl. rate	<u>WEEKLY</u> w/ micros 1.12 lb/M/wk 0.16 lb N/M/wk	<u>MONTHLY</u>  (4.47 lb/M/mo.) (0.62 lb N/M/mo.)
<u>135A</u> 10-4-10 Appl. rate:	<u>WEEKLY</u> amended + Menefee Humate™ at 27.5% w/w 1.17 lb/M/wk 0.12 lb N/M/wk	<u>MONTHLY</u>  (4.6 lb/M/mo.) (0.47 lb N/M/mo.)

lb/M= pound per 1000 sq feet

lb N/M = pound of Nitrogen per 1000 square feet