THE UNIVERSITY OF ARIZONA
Yuma Center of Excellence for Desert Agriculture

2024 *Fusarium oxysporum* f.sp. *lactucae* Field Trial Results

Planting Date: 9/17/2025

Wet Date: 9/20/2024

Evaluation Date: 12/2/2024

The trial was in Yuma, AZ in a field with a silty clay loam naturally infested with *Fusarium oxysporum* f.sp. *lactucae*. Cultivars were direct seeded in 100-foot sections in single seed lines on 34-in. beds, then sprinkler-irrigated to germinate seed on 20 Sep. Each cultivar was planted four times in a randomized complete block design. At two weeks post-planting, the beds were thinned to a 12-in. spacing. Plots of 50 plants were flagged post-thinning in each replicate for evaluation.

Disease Severity (DS) was recorded by evaluating on a 0-to-4 disease severity scale 0 = symptomless plants; 1=slight chlorosis on outer leaves, stunting; 2 = more extensive chlorosis and stunting, in-slot varieties have stunted head; 3 = severe stunting, chlorosis, and no head formation; and 4 = remaining leaves are chlorotic and nearly dead, or plant is entirely dead. Mean DS was calculated by averaging 50 plants from each of the four replicates.

Marketable Heads (MH) was recorded as a plant having a head >5 inches and no symptomatic leaves on the head. Outer wrapper leaves may show symptoms.

Although the DS rating was based on a categorical scale of 1 to 4, each replication was a mean of 50 plants and thus, the analysis of variance (ANOVA) was performed on non-categorical data ($P \leq 0.05$) followed by Post Hoc analysis using Tukey's honest significance difference (HSD) test. Mean DS scores with the same letter are not significantly different as determined by Tukey's HSD test ($P \leq 0.05$).

Corky root disease and Sclerotinia were found in the trial field in 2024. The impact on disease severity rating has not been determined.

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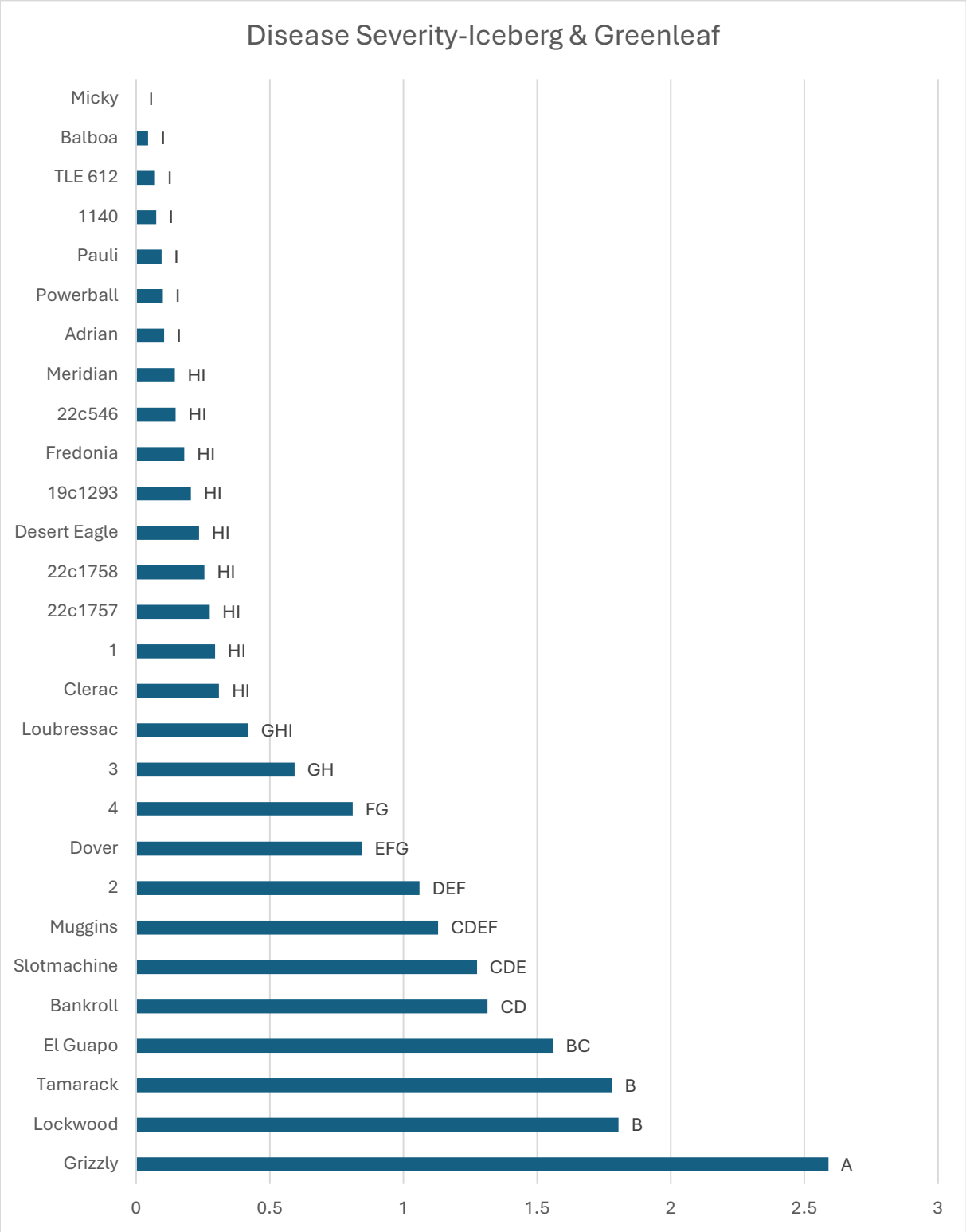

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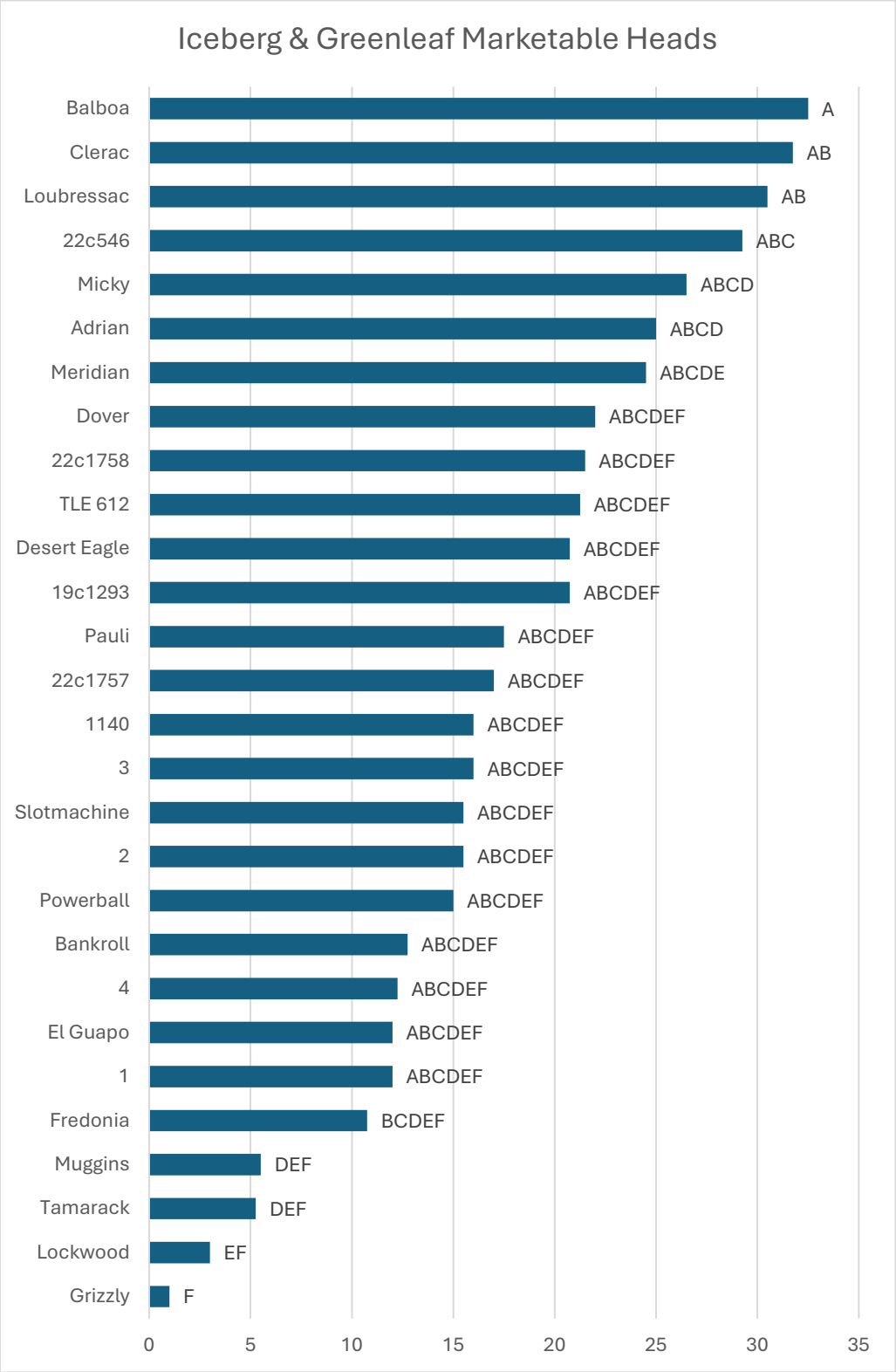

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