

Differential Sets

Fusarium oxysporum f.sp. apii (Foa)- Celery

Differential hosts				
	Foa: 1	Foa: 2	Foa: 3	Foa: 4
Golden Self Blanching	S	S	S ^c	S
Tall Utah 52-70R Improved ^a	HR	S	S	S
Challenger ^b	HR	HR	HR	S

S = susceptible; HR = highly resistant

^aOther Tall Utah cultivars can also be used.

^bcv. Sabroso and Stix can also be used.

^cSusceptible Foa interactions with celery are temperature-dependent and more pronounced at 26 to 30 °C, which are higher-than-optimal temperatures for celery. Previously, Golden Self Blanching was classified as resistant to Foa race 3 (Puhalla 1984, Epstein et al. 2017); however, at the recommended greenhouse temperatures of 26 to 30 °C, it is susceptible (Kaur and Epstein, unpublished). Foa races 2 and 3 are easily distinguished by DNA sequencing at the translation elongation factor 1 α locus or use of specific PCR primers (Epstein et al. 2017).

References

- Correll, J.C. et al. 1986. Identification of *Fusarium oxysporum f.sp. apii* on the basis of colony size, virulence and vegetative compatibility. *Phytopathology* 76: 396-400
- Epstein, L. et al., 2017. Races of the celery pathogen *Fusarium oxysporum f.sp. apii* are polyphyletic. *Phytopathology* 107(4): 463-473
- Kaur, S and Epstein, L. (unpublished)
- Nelson, R. et al., 1937. The Fusarium yellows disease of celery (*Apium graveolens* L. var. *dulce* DC.). Technical Bulletin. Michigan Agricultural Experiment Station No. 155
- Puhalla, J.E. 1984. Races of *Fusarium oxysporum f.sp. apii* in California and their genetic interrelationships. *Canadian journal of botany* 62(3): 546-550

Note: This table was generated by using scientific publication solely. Based on our knowledge there is no seed industry practice that would verify the performance of the table

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