Status and Performance of 'M.26' Rootstock

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To date the status of 'M.26' varies according to where it is grown and with the variety budded to it. In general, the response concerning 'M.26' from growers and research men during the past decade, has been favorable.

'M.26' is one of the newer clones from East Malling developed out of a cross of 'M.16' and 'M.9'. It was introduced to the U.S.A. in about 1958. According to W. S. Rogers,[2] 'M.26' should fill the vigor gap between 'M.9' and 'M.7'.

Characteristics: 'M.26' forms an over-growth of the stem below the graft union similar to that of 'M.9'. Its roots are somewhat brittle, also a characteristic of the 'M.9'; however, its root anchorage is better. It is more precocious than 'M.7', giving high production of large uniform fruit. 'M.26' does not sucker as much as 'M.7' and propagates well in stool beds. It is not resistant to wooly aphids or to collar rot.

Performance: Although most test orchards are less than 10 years old in the U.S.A., reports show that 'M.26' performs well under certain soil and climatic conditions. Where problems of collar rot have occurred, the cause often has been due to compact clay soil conditions. The performance concerning precocity, cropping, tree vigor, and anchorage has been better than 'M.9' and equal to that of 'M.7'.

In test plantings of 'M.26' on clay loam soil in Michigan, performance of this rootstock for 'Golden Delicious', 'Red Delicious' and 'Jonathan' has to date shown the following trends:

1. The trees of 'Golden Delicious'/'M.26' are well anchored and have not been staked; however, the trees are rather small in their 8th year. Staking this variety would help in training the central leader and avoiding "fruiting out" of the leader.
2. 'Jonathan'/'M.26' has given a larger bushier tree and it appears to be a very compatible combination. There has been no problem with tree anchorage.
3. 'Spur Red Delicious'/'M.26' to date appears to be an excellent combination giving early fruiting, high production, and good tree anchorage.

Height of Budding: For improved tree anchorage the 'M.26' rootstock should be budded at least 12 inches above ground level in the nursery. In so doing, the 1-year old trees can be planted 10 inches deeper in the hole when setting the trees. However, if the soil is heavy, avoid using 'M.26' rootstock, because collar rot can be serious, especially with high budded trees planted deep.

Tree Spacing: Most apple varieties on 'M.26' observed during the past decade respond favorably in tree growth and cropping, however, tree size will vary with the scion variety. Therefore, in planting and spacing trees in the orchard, the particular scion variety used should be considered. The less vigorous varieties

[1]Department of Horticulture, Michigan State University.

[2]Rogers, W. S. 1958. "Malling 26, A New Semi-dwarfing Apple Rootstock." Annual Report of the East Malling Research Station.

should be spaced 8 x 16 feet (339/acre) and the vigorous varieties, 10 x 18 feet (242/acre). An average tree spacing for all scion varieties/'M.26' could be in the vicinity of 8 x 18 feet.

Prospective: It appears that 'M.26', although not completely evaluated, will become a widely used apple rootstock for compact trees in high density plantings. After more information has been gained, 'M.26' may prove to be comparable to 'M.7' in longevity and performance. Since 'M.26' does not tolerate heavy soil types or wet soils in the spring, it should be planted only on orchard sites with well drained sandy loam soils.

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