

Tomato Rootstock Breeding

Menno ter Maat

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Grafting plants was practiced already by man in ancient civilizations, mainly for artistic and botanical reasons. The use of grafted tomato plants mainly started up for having disease resistance without being bothered by linkage drag in all sorts of fruit quality aspects.

Rootstock history changed when interspecific crosses started to be made. Firstly, with the goal of obtaining a high level of resistance to corky root rot (*Pyrenochaeta lycopersici*), but soon after it was observed that these hybrids also gave an increased cold tolerance and plant vigour.

Up to the 1990's, these rootstocks still kept a low profile worldwide, because the grafting method at those days was very inefficient, germination of these interspecific crosses was very low, a large area with cold crops was replaced by heated crops and the shift to rock-wool substrate in northern Europe made all resistances to soil-borne diseases redundant.

With the introduction of the 'Japanese' grafting method to Europe, large scale grafting at a lot lower cost became feasible. In 1996, De Ruiters Seeds added resistance to *Fusarium* crown root rot to the resistance profile resulting in the first rootstock that actually got a variety name: Beaufort. When germination was improved drastically some years later, the rootstock market grew to its mature shape that we know today.