Looking for better peach rootstocks for the northern US growing climate

Nurseries, growers, and researchers are always looking for rootstock for better peach tree health. Bailey, Lovell, and less commonly Halford and Tennessee Natural are rootstock used in the variable soils and occasionally very cold Michigan climate. Chui Lum Tao is a rootstock from China tested by Canada that has performed similarly to Bailey with slightly less vigor.

Several other rootstocks recently available in the nursery trade may have promise for the colder peach growing regions of the US. Guardian has shown good performance over the last 7 years in Michigan tests. Slightly more vigorous than Bailey, Guardian was developed in the SE United States to combat peach shortlife problem. We have not had a very cold test winter similar to 1994, so survival under very harsh conditions is unknown. Four other rootstocks are being tested in Michigan based on their reputation for cold hardiness. Krymsk 1, 2, and 86, and Pumiselect are known to be dwarfing to peach and other stone fruit. The Krymsk selections were derived from crosses with other stone fruit species but so far are thought to be compatible with peach. These four rootstock are propagated by cuttings or other clonal methods. The jury is still out on these—growers should go cautiously for now.

Roostock	Origin	Background	Clonal or seedling	Compatible with	Cold hardy	Tree size compared to Bailey	Tolerant of wet feet	Notes
Bailey	Iowa	peach	seedling	peach	yes	100%	fair	decent lesion nematode resistance
Lovell	California	peach	seedling	peach	yes	105%	fair	susceptible to root-knot
Halford	California	peach	seedling	peach	fairly good	95%	fair	
Tennessee Natural	Tennessee	peach	seedling	peach	yes	105%	fair	
Chui Lum Tao	China	peach	seedling	peach	yes	95%	fair	
Guardian (BY520-9)	South Carolina	peach	seedling, bulked seedlot	peach	good in initial testing	110%	?	tolerant to root-knot
Krymsk 1 (VVA-1)	Russia	Nanking cherry x myrobolan	clonal	peach, plum	yes	40 to 50%	good	
Krymsk 2 (VSV-1)	Russia	willow cherry x myrobolan	clonal	peach, apricot, European plum	yes	50 to 50%	?	resists drought
Krymsk 86 (Kuban)	Russia	Peach x myrobolan	clonal	peach, apricot, almond & plum	yes	40 to 50%	good	
Pumiselect (Rhenus 2)	Germany	sand cherry	clonal	peach, apricot	yes	60%	poor	

Nanking cherry = Prunus tomentosa, Myrobolan plum = Prunus cerasifera, willow cherry = Prunus incana, apricot = Prunus armeniaca, sand cherry = Prunus pumila, European plum = Prunus domestica