

GRDC-NVT Nematode Resistance Rating Definitions

Nematode Resistance

Nematode Resistance relates to the effect of the variety on the nematode density present within the paddock. A standard nematode resistance rating system has been adopted for all crops in all states across Australia. This document helps to explain the values and their implications for growers and advisors.

Standard Disease Ratings

Rating	Alpha Code	Numeric Code
Resistant (R)	R	9
Resistant – Moderately Resistant (R-MR)	R-MR	8
Moderately Resistant	MR	7
Moderately Resistant – Moderately Susceptible	MR-MS	6
Moderately Susceptible	MS	5
Moderately Susceptible – Susceptible	MS-S	4
Susceptible	S	3
Susceptible – Very Susceptible	S-VS	2
Very Susceptible	VS	1



Rating	Management Option Description	For Growers: What do I see?	For Growers: What do I do?
Resistant	Growing these varieties will reduce the density of the nematode in question and so reduce yield loss in subsequent intolerant crops.	There will be a reduction in nematode densities when these varieties are grown.	Use these varieties in rotation with non-host crops to reduce nematode infestations. If using R varieties in paddocks with high nematode infestations make sure variety is also tolerant to prevent significant yield loss.
Moderately Resistant	Growing these varieties will, to a lesser degree than growing a resistant variety, reduce the density of the nematode in question and, therefore, reduce yield loss in subsequent intolerant crops.	There will be a reduction in nematode densities when these varieties are grown.	These varieties are suitable to be grown in paddocks with high nematode infestations as they reduce nematode densities. They will, however, not reduce nematode densities to the same degree as a resistant variety. Note that if nematode densities are high tolerant to minimise yield loss.
Moderately Susceptible	Growing these varieties will result in a small increase in nematode densities during the season.	Growing these varieties will increase the nematode density. However, unless the season is exceptionally favourable, growing these varieties in paddocks with low level nematode densities will only increase densities to moderate levels. If nematode densities are already moderate these varieties may result in high densities that may cause substantial loss in a following intolerant variety.	These varieties are suitable to be grown in paddocks with low nematode densities. They will, however, increase nematode densities which may be a problem for a following intolerant crop.
Susceptible	Growing these varieties will increase nematode density which may then cause problems to a following intolerant crop.	Growing these varieties will result in increases in the density of the nematode in question. However, unless the season is exceptionally favourable, growing these varieties in paddocks with a low level will only result in moderate levels. If nematode densities are already moderate these varieties can result in high levels that may cause substantial loss in a following intolerant variety.	These varieties will increase the density of nematodes in a paddock that may be of concern to a following intolerant crop. If nematode densities are high following a susceptible crop, growers should avoid intolerant crops in the following year and select a resistant crop to reduce nematode densities.
Very Susceptible	Growing these varieties will support large multiplication rates of the nematode. It may take more than one year of a resistant variety/non-host crop to reduce the nematode densities to a level that will not affect the yield of an intolerant crop.	These varieties will support large increases in nematode numbers when grown in infested paddocks.	Growers should where possible avoid growing these varieties in infested paddocks. Also avoid= growing intolerant varieties after VS varieties due to the potential for significant yield loss. A tolerant non-host crop/resistant variety should be used following VS varieties to reduce nematode densities. If nematode densities are very high it may take more than two years of non-host/resistant varieties to reduce nematode levels to low risk densities.