

GRDC-NVT Disease Tolerance Rating Definitions

Nematode Tolerance

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
Tolerant	T	9
Tolerant – Moderately Tolerant	T-MT	8
Moderately Tolerant	MT	7
Moderately Tolerant – Moderately Intolerant	MT-MI	6
Moderately Intolerant	MI	5
Moderately Intolerant – Intolerant	MI-I	4
Intolerant	I	3
Intolerant – Very Intolerant	I-VI	2
Very Intolerant	VI	1



Rating	Management Option Description	For Growers: What do I see?	For Growers: What do I do?
Tolerant	Variety will not lose yield in the presence of the nematode, even at high nematode densities.	The crop will not be affected by the presence of the nematode.	No economic management decisions required.
Moderately Tolerant	These varieties can generally be sown in paddocks with low to medium levels of nematode infestations without a significant effect on grain yield occurring. These varieties can suffer yield loss (up to 10%) in the presence of high nematode densities.	Minimal yield loss will occur in the presence of the nematode (i.e. < 5%), except when nematode densities are high when up to 10% yield loss may occur.	Do not grow these varieties in paddocks with high nematode densities present. Suggest follow management recommendations to minimise yield loss for the nematode of concern.
Moderately Intolerant	These varieties should not be grown in paddocks with medium to high nematode densities. In the presence of high nematode densities in a paddock these varieties will lose up to 30% yield.	In the presence of the nematode and in seasons conducive to disease, these varieties will lose yield and may show symptoms consistent with root damage. The expression of symptoms will be greater in paddocks with higher nematode densities.	These varieties should not be grown in paddocks with medium to high nematode densities. In the presence of high nematode densities in a paddock these varieties can lose up to 30% yield. Suggest follow management recommendations to minimise yield loss for the nematode of concern.
Intolerant	These varieties are prone to yield loss even in the presence of low nematode densities. Such varieties should not be grown in paddocks where nematodes are known to be present. In the presence of high nematode densities yield loss of up to 50% can occur.	In the presence of the nematode symptoms of root disease will often be easily found in the crop.	Do not grow these varieties in paddocks where the nematode is present at medium to high levels. Even paddocks with low nematode densities should be avoided when possible. Suggest follow management recommendations to minimise yield loss for the nematode of concern.
Very Intolerant	Do not grow this variety unless the paddock is known to be nematode free or present at very low densities. High nematode densities could cause yield losses of greater than 50% to occur.	Symptoms of nematode damage will be present in these varieties even in the presence of low nematode densities.	Do not grow these varieties in paddocks where the nematode is present, even at low levels. If the variety is to be grown a soil test should be conducted prior to sowing to ensure that the paddock is free from the nematode in question. Suggest follow management recommendations to minimise yield loss for the nematode of concern.