

Nema-Test
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**2018 Nematode Threshold
 Levels Crop = Golf Greens/Turf**

www.nematest.com

Given Below are estimated threshold values for injurious (pathogenic) nematodes on golf courses or turf grown anywhere in the USA. It is a slight modification of my first list printed in 1996. Attempting to establish a strict threshold value is folly, as local environmental factors such as water, heat, wind, soil type all come into play when assessing stress caused by pathogenic nematodes. However, some line must be drawn, and I have done that for three seasons, however that may not be appropriate for courses in FL or TX as it is for central USA. Three nematodes (sting lance, and root knot) have caused most of the damage that I have seen, but in my opinion, there are five other damaging ones: the needle, lesion, stubby root, stunt, and dagger. The spiral, ring and Hemicycliophora nematodes can be injurious if found in high numbers.

Nematodes Per 100 cm ³ soil	Threshold Levels		
	Early Spring April - May	Mid Summer July - August	Early Fall Sept - October
A.Stylet Forms			
Aphelenchoides	+	+	+
Aphelenchus	+	+	+
Belonolaimus (Sting)	1	1	1
Criconema/Mesocriconema (Ring)	300	400	600
Ditylenchus (Stem)	No Data	No Data	No Data
Dorylaimus/Dorylaimida	No Data	No Data	No Data
Helicotylenchus (Spiral)	400	600	800
Hemicycliophora (Sheath)	150	150	150
Heterodera (Cyst)	++	++	++
Hoplolaimus (Lance)	15	25	40
Meloidodera (Cystoid)	10	25	50
Meloidogyne (Root Knot) juveniles	50	100	150
Longidorus (Needle)	1	1	1
Paratrichodorus (Stubby Root)	25	50	100
Paratylenchus (Pin)	No Data	No Data	No Data
Pratylenchus (Lesion)	25	50	100
Rotylenchus	No Data	No Data	No Data
Rotylenchulus (Reniform)	No Data	No Data	No Data
Tylenchorhynchus/Quinisulcius (Stunt)	25	50	100
Tylenchus/Psilenchus	+	+	+
Xiphinema (Dagger)	40	40	40
Other:			
B.Non-Stylet Forms	++	++	++
Nematodes Per Gram Dry Root			
Hoplolaimus (Lance)	50	75	100
Pratylenchus (Lesion)	300+++	400	600
Meloidogyne (Root Knot)	50	100	150
Other:			

Comments: + = Fungal Feeders, no threshold value assigned
 ++ = Non-pathogenic to turf plants
 +++ = Lesion often high in young plants due to small root mass concentrating them; but plants can outgrow feeding effects of lesion nematodes under this number.
 = Severely pathogenic nematodes

Threshold levels are those levels of nematodes that would reduce stand by 25%.