

## Biological Soil Analysis - Parasitic Nematodes



Date	17/02/2021
Sample reference number	BGC170221N
Sample description	Greens - 2, 3 & 4
Crop/Plant type	Bent/Poa

	Green 2	Green 3	Green 4	Trashhold/200ml	Green 2	Green 3	Green 4
Plant Parasitic Nematodes					% of Trashhold	% of Trashhold	% of Trashhold
Ibipora (Sting)	78.00	79.00	27.00	20.00	390.00%	395.00%	135.00%
Rotylenchus (Spiral)	158.00	92.00	378.00	2000.00	7.90%	4.60%	18.90%
Hemioylophora (Sheath)	0.00	0.00	0.00	300.00	0.00%	0.00%	0.00%
Heterodora (Cyst)	0.00	0.00	0.00	200.00	0.00%	0.00%	0.00%
Hoplotaimus (Lance)	0.00	0.00	0.00	200.00	0.00%	0.00%	0.00%
Meloidogyne (Root Knot)	0.00	4.00	18.00	200.00	0.00%	2.00%	9.00%
Mecooiroonema (Ring)	2.00	0.00	2.00	200.00	1.00%	0.00%	1.00%
Pratylenchus (Lesion)	0.00	0.00	0.00	200.00	0.00%	0.00%	0.00%
Paratylenchus (Pin)	0.00	0.00	0.00	2000.00	0.00%	0.00%	0.00%
Triehodorus (Stubby Root)	36.00	10.00	8.00	150.00	24.00%	6.67%	5.33%
Xiphinema (Dagger)	0.00	0.00	4.00	300.00	0.00%	0.00%	1.33%

Client: Paul Patten, Soilsmart. BGC080221N1, N2, N3

Accession no.: BCP 6330

Sample details: Three samples of Bent/Poa turf from [redacted]. This was a precautionary check to assess nematode activity.

Date received and condition of sample: The samples were received in good condition on 22 February 2021. Each sample was likely to be representative of the green from which it was obtained, as the samples consisted of many 15 mm diameter cores. The sample was received in good condition on 10 February 2021.

Extraction method: : 200 mL samples (210 g moist wt.) were processed for 2 days at 24-30°C on a Whitehead tray.

### Results:

Southern sting nematode (*Ibipora Ioli*) is a serious pest of turf grass and it is present at population densities that are much higher than the damage threshold of 5-20 nematodes/200 mL soil. I would expect it to be causing considerable damage to the root systems on all three greens.

Numbers of spiral nematode (*Rotylenchus brevicaudatus*) are high, but it is not very pathogenic to turf grass, while the other parasitic nematodes are present at very low population densities.