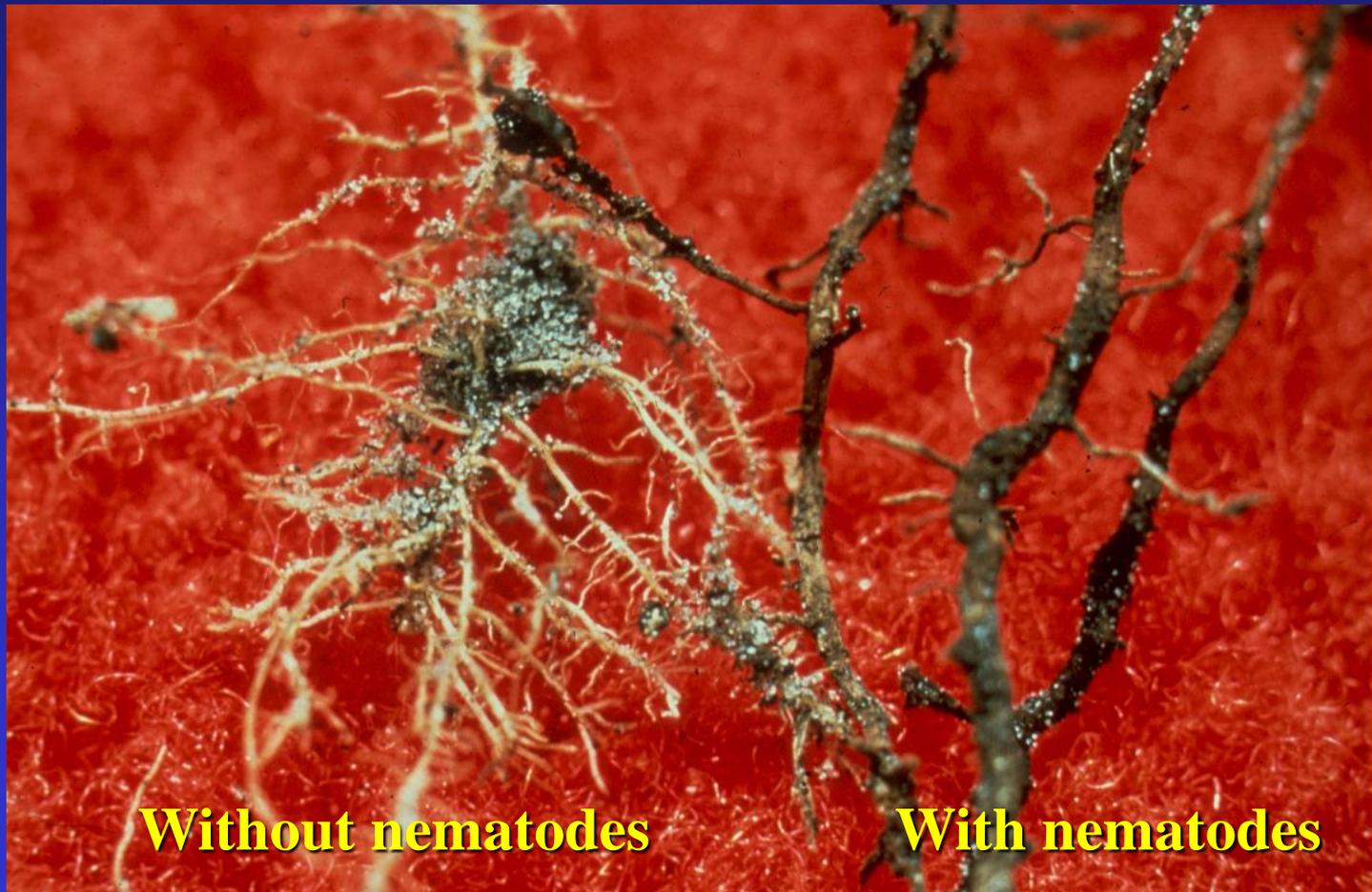


Rotting and discolored roots



Foliar nematodes

- **Migratory endoparasites**
- **Angular leafspots, distorted buds**
- **Damage most common in nurseries**

Foliar nematodes on Philippine violet

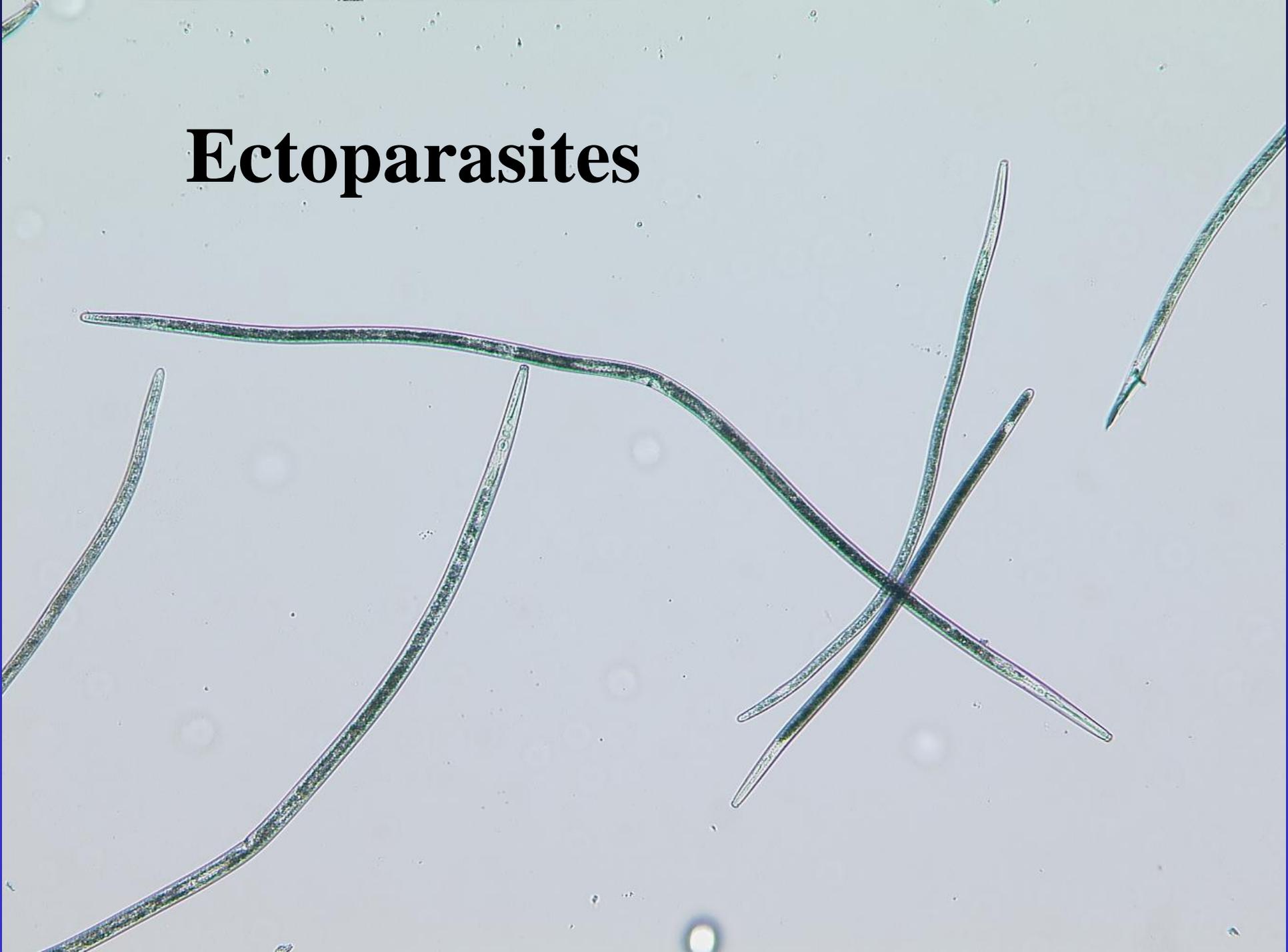
Angular lesions
that resemble
bacterial leafspots



Foliar nematodes



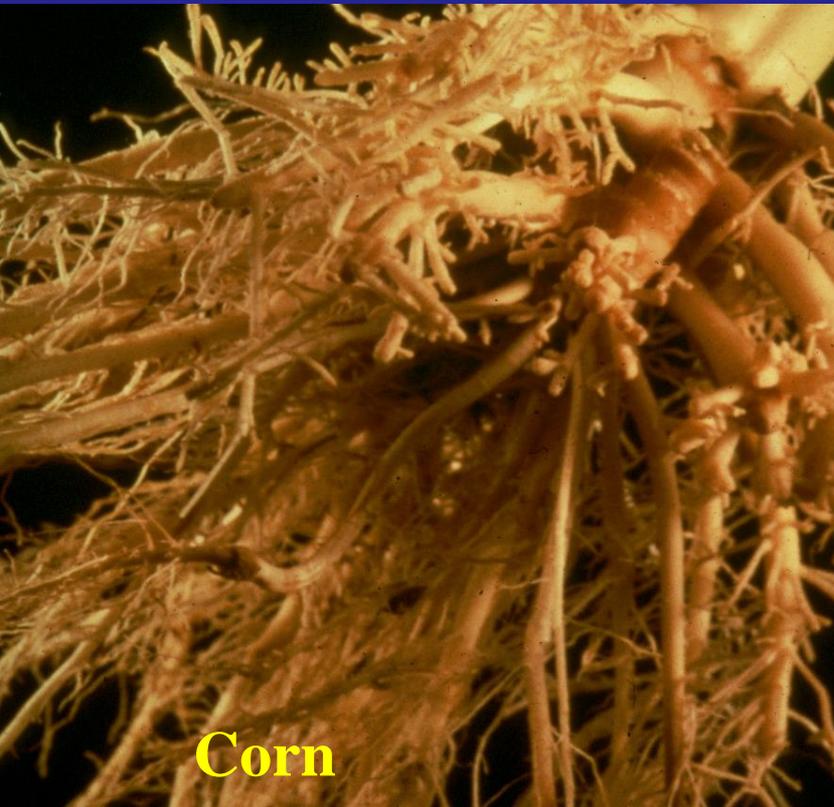
Ectoparasites



Abbreviated “stubby” roots



Cotton



Corn



Strawberry



**Root cropping and
stunting**

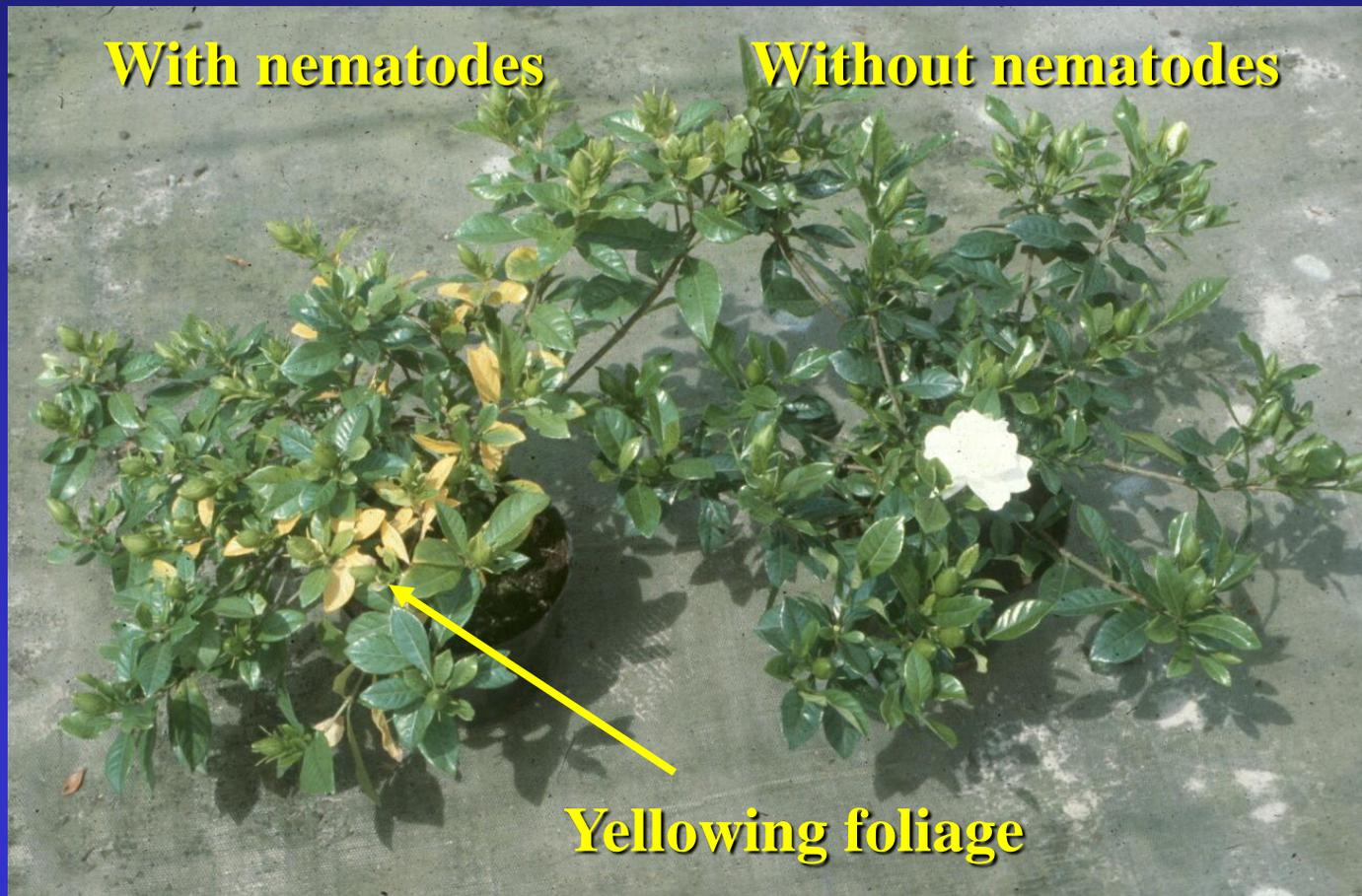
Above-ground symptoms of nematodes on ornamentals

- Wilting
- Yellowing
- Stunting
- Thinning
- Death

Declining



Yellowing, stunting





Declining patches





A photograph of a green lawn with a large, dense patch of weeds in the center. The weeds are a darker green color and have a more textured appearance than the surrounding grass. The word "Weeds" is written in yellow text at the bottom center of the image.

Weeds

Nematode diagnosis

- **The only way to determine if nematodes are a problem in most cases is with a nematode assay**
- **This is usually a separate test, and is submitted separately from a standard disease sample**
- **Nematode assays are both quantitative and qualitative**

Sampling

The quality of the diagnosis is only as good as the sample that is received

Sampling

- **Sample must consist of multiple cores**
 - Nematode populations are unevenly distributed
- **8 to 12 cores per area are usually sufficient**

Take lots of cores

		176	205		
	605	303	567	227	
	523	71	51	251	
9	279	74	55	422	
171	31	9	135	280	143
266	214	19	7	197	32
710	470	107	4	149	8
88	23	50	25	427	26
331	162	29	439	64	59
105	53	11	44	52	34
33	28	158	4	264	4
7	13	255	259	462	25
	341	37	53	269	2
	18	76	347	26	
		3	203		

Sample depth

- **Depends on the crop, think about how deep the root system is**
 - **Most trees – 10 to 12 inches deep**
 - **Shrubs & vegetables – 8 to 10 inches deep**
 - **Bedding plants – 4 to 8 inches deep**
 - **Turf 3 to 4 inches deep**

Handling

- **Place soil and roots in a plastic bag and seal**
- **Use a separate bag for each sampled area (yard, bed, etc.)**
- **Label each bag with a permanent marker**
- **Handle gently**
- **Avoid heat and direct sunlight**