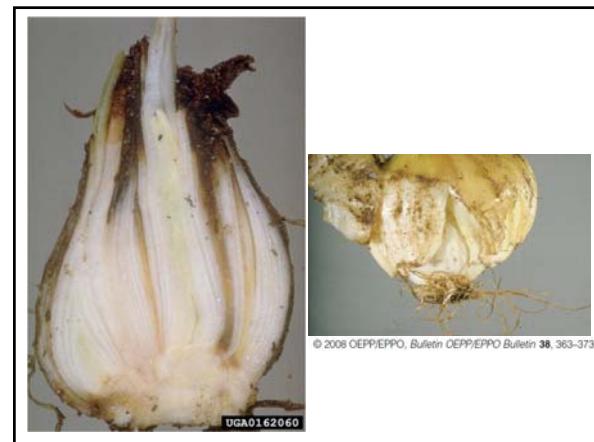
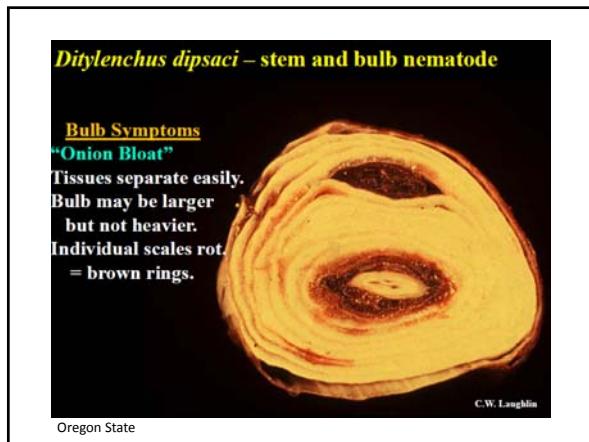
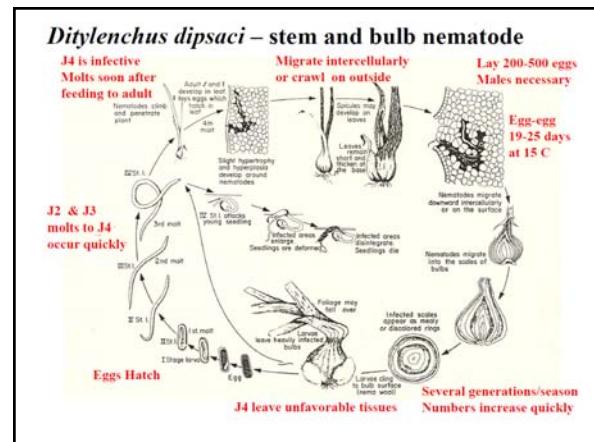


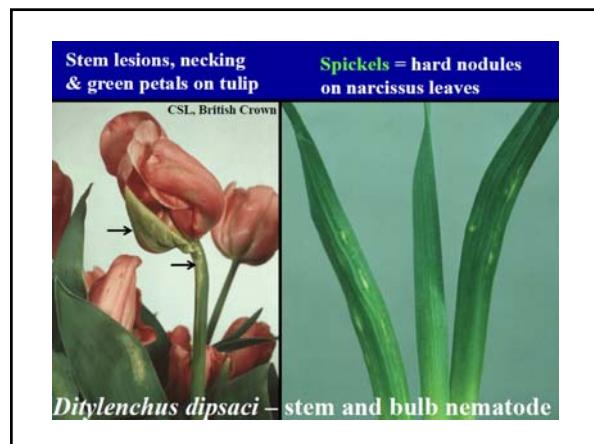
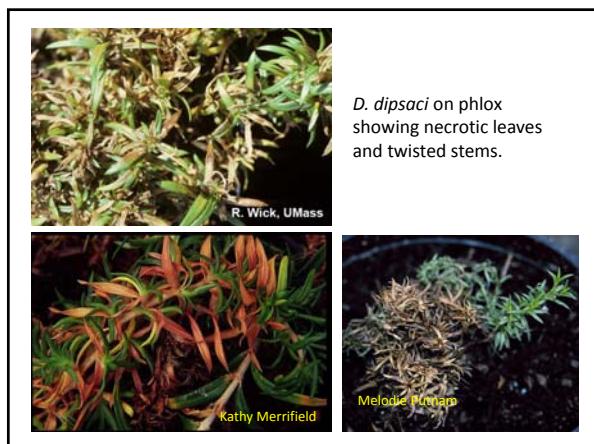
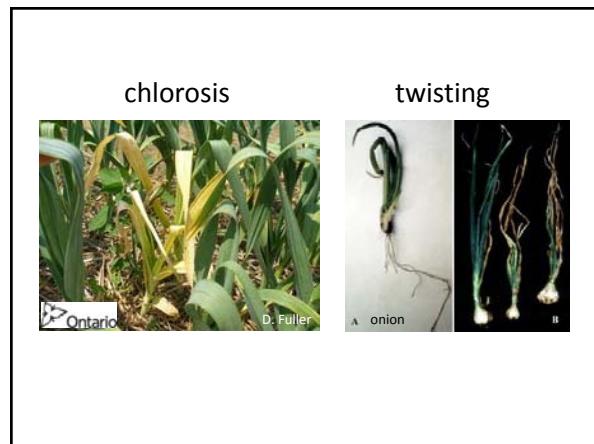
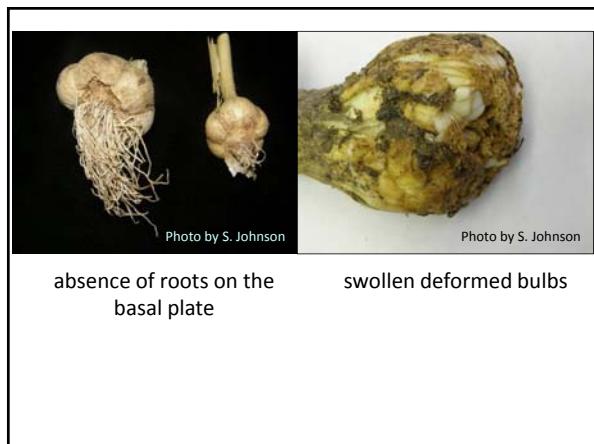
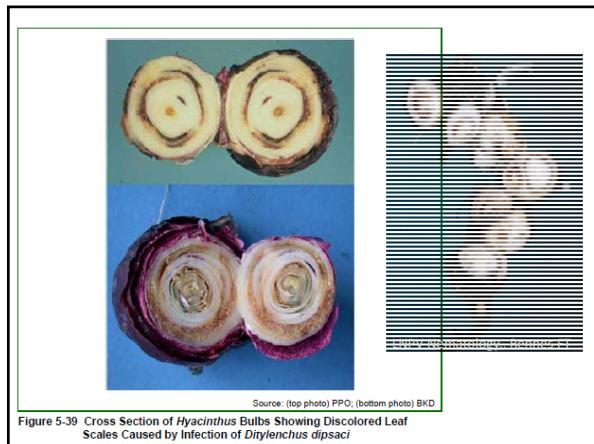
➤ more than 80 species  
➤ difficult to distinguish morphologically  
➤ many host races  
➤ host range of many “races” overlap

	Onion	Garlic	Leek	Spinach	Chicory
Population from chicory	0	1	0	1	2
Population from garlic	2	2	0	0	1

0 – no nematodes survived; 1 – only single adult individuals survived; 2 – life cycle of the parasite completed

DOUDA O. (2005): Host range and growth of Stem and Bulb Nematode (*Ditylenchus dipsaci*) populations isolated from garlic and chicory. *Plant Protect. Sci.*, 41: 104–108.





**Cultural practices:**

- plant clean, uninfested cloves
- grow nonhost crops
- do not bring infested soil into fields

**Chemical control:**

- pre-plant fumigation
- oxymyl

### Recovery and Identification

Incubation Basics

Cover plant tissues with water. To obtain a clean prep, place plant tissues on Kleenex - nematodes will crawl through the tissue and collect in the water reservoir.

Table 1 Key to distinguish *Ditylenchus* spp. from other tylenchid genera (modified from Brzeski, 1998)

1	Females mobile	2	Other genera
	Females swollen, globe or lemon-shaped	3	Other genera
2	Female gonads paired or reflex when prodelphic	4	Other genera
	Pharyngeal glands offset from intestine or slightly overlapping it	5	Other genera
3	Pharyngeal glands distinctly overlapping intestine		
	Metacropus offset from procorpus, metacropod plates short or absent		
4	Procorpus gradually expanding into large metacropus, metacropod plates long		
	Sperm large, head usually low, spermatheca not off-set		
5	Sperm small, head usually high, spermatheca off-set in most genera		

Table 2 Discriminating morphological characteristics of *D. destructor*, *D. dipsaci*, *D. concolor* and *D. myricophilus* (after Decker, 1969)

<i>D. destructor</i>	<i>D. dipsaci</i>	<i>D. concolor</i>	<i>D. myricophilus</i>
A ratio ♀	32 (18–41)	37 (36–40)	42 (32–54)
Body length ♀ (mm)	1.0 (0.8–1.4)	1.1 (0.9–1.3)*	0.9 (0.6–1.0)
Stylet length (μm)	10–12	11–13	7–10
Post-velval bulb	short, dorsally overlapping	not overlapping	short, dorsally overlapping
Number of lateral lines	6	4	6
Valva position (%)	80 (78–83)	82 (79–82)	77 (74–79)
Post-velval sac length	2/3–3/4 of vulva-ann distance	1/2 of vulva-ann distance	1/4–1/2 of vulva-ann distance
Valva-ann length	1 3/4–2 1/3 tail length	1 3/4–2 1/4 tail length	2–2 1/2 tail length
Tail shape	conoid, usually slightly bent to ventral side in posterior part	conoid	conoid
Tail tip	finely rounded	sharply pointed	sharply pointed
Speculum length (μm)	9–12	10–12	8–11
Length of conelobal stylet length	About 50%	About 50%	<< 50%

\*The "giant" race of *D. dipsaci* in Fabo bean can be up to 2.0 mm long.

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