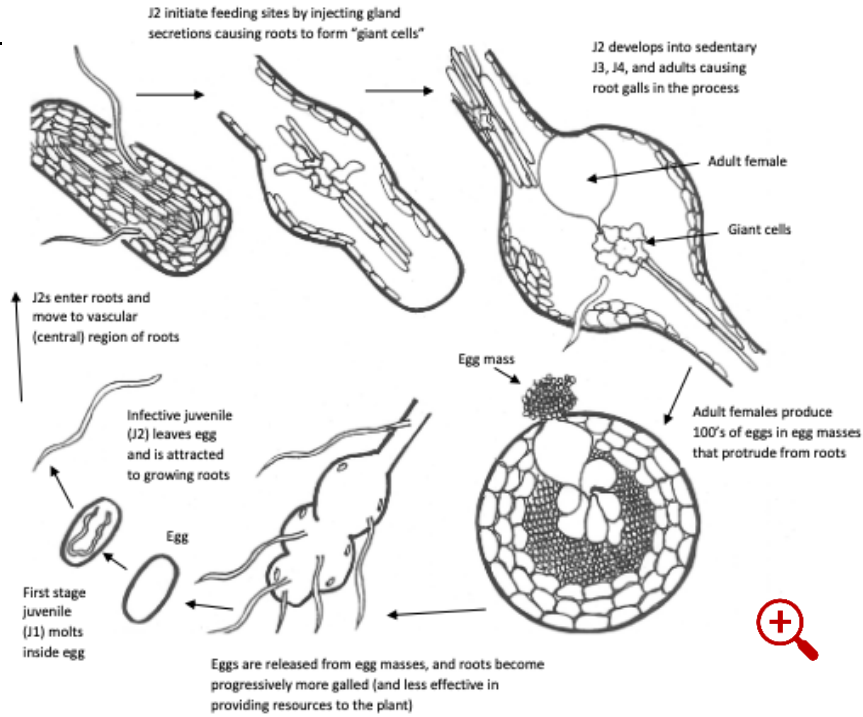


Root-Knot Nematode & Hemp: A Quick Look into Hemp Pests in Florida

Root-Knot Nematode (*Meloidogyne* spp.)

- ⇒ Microscopic endoparasitic plant parasites
- ⇒ Causes roots to form galls or knots
- ⇒ Causal agent of root-knot disease in many crops
- ⇒ Extremely common in Florida
- ⇒ Worldwide distribution
- ⇒ Wide host range



Mature female RKN with stained egg mass (red)

Root-knot nematode on hemp roots

Hemp:

Cannabis sativa with less than 0.3% THC

- ⇒ delta-9-tetrahydrocannabinol
- ⇒ the psychoactive compound found in cannabis plants

What impact do root-knot nematodes have on hemp?

By conducting two separate greenhouse experiments that focused on the host status and susceptibility of 6 hemp cultivars to a mixed population of root-knot nematode (RKN):

HEMP:

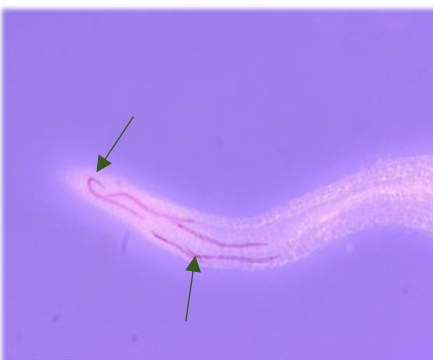
- ⇒ Is a good host for RKN
- ⇒ Has tolerance to RKN
- ⇒ Cultivar differences were seen



⇒ Biomass is not negatively impacted*
 ♦ *root weight reduced in some instances when compared to healthy, uninfected roots.



⇒ Total THC is not affected by presence of root-knot nematode



Roots stained with 12% red food-dye showing the stained juveniles (pink, arrows) within hemp roots one week after inoculation with RKN eggs. cv. Carmagnola Selezioneata

To support the future viability and sustainability of hemp, and considering the importance of nematodes in Florida, it is critical to assess the impact that root-knot nematodes may have on this crop



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