**Microbe-animal interaction: Nematophagus fungi**

Some fungi prey on nematodes as a source of nutrients. The most common genera of nematode-trapping fungi are Arthrobotrys, Dactylaria, Dactylella and Trichothecium.

Several mechanisms by which these fungi capture nematode prey, including-

1. Production of networks of adhesive branches
2. Stalked adhesive knobs
3. Adhesive ring
4. Constrictive rings

when a nematode attempts to move past an adhesive structure, it stick to it and is trapped. When a nematode tries to pass through a constrictive ring, the fungal ring contracts by a sudden osmotic swelling and traps the nematode. Violent movement and attempts by the nematode to escape generally fail. The fungal hyphae penetrate into the nematode, which is then enzymatically degraded.

The presence of the prey nematode appear to induce the formation of morphological structures that traps the nematodes. This is the unique relationship in which the presence of the prey induce the formation of fungal structure that results in its capture consumption.

Most nematode-trapping fungi are Deuteromycota, but few Basidiomycota also have the ability to attack and digest nematodes. Hohenbuehelia and Resupinatus species were found to capture nematodes by means of adhesive knobs.

The edible oyster mushroom Pleurotus ostreatus and related Pleurotus species form no trap structure. Instead by means of some toxin, they rapidly paralyze nematode

Reference

1. Atlas and Bartha, Microbial Ecology: Fundamentals and Applications, fourth edition, Pearson