Potential new targets for entomopathogenic nematodes

Vladimír Půža & Jiří Nermuť, Biology Centre CAS, Czech Republic, UTC+1

Bark beetles

Application on 1 m long spruce logs by spraying 250 thousand of Ijs in water.

Number of surviving bark beetles was evaluated after 5 days.

Efficacy of *S. carpocapsae* strain 1343 from the Czech Republic was 100 %.

EPNs are effective bioagents for treating wood infested with bark beetles.

Mites

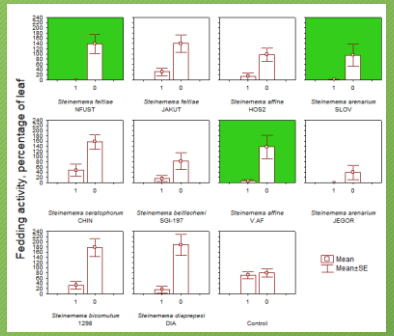
EPNs are able to kill *Rhizoglyphus* mites and develop to adults.

Heterorhabditis spp. are more virulent and cause higher mortality than *Steinernema* spp.

Average nematode load – 2.5 larvae per mite.

Highest load – 34 larvae (*H. bacteriophora* JUSC 14).

Slugs



Metabolites of symbiotic bacteria repel arionid slugs.

The highest effect observed in S. feltiae, *S. arenarium* and *S. affine*.

P. hermaphrodita repel slugs as well.

Additive/synergistic effect between bacterial metabolites and nematodes (zero feeding) recorded.