

Health & Safety

C. elegans - safety note

C. elegans is widely used as model organism for helminthic parasites. The most common human helminth infection in the UK is threadworms or pinworms (*Enterobius vermicularis*). *C. elegans* therefore is a useful model organism for project work as results can be related to a common infection. Working with *C. elegans* in the school laboratory is more likely to raise issues of sensitivity rather than ethics, although respect for all living things should be observed.

Levamisole acts as an acetylcholine receptor agonist leading to paralysis. Such cholinergic chemicals have largely been removed from sale (e.g. neurotoxic

insecticides). Levamisole is not licensed for human use in the UK although it is available for use in agricultural livestock. Consequently we do not consider it suitable for use in schools.

Preparations containing Mebendazole (Ovex) are available for the treatment of threadworms without prescription from pharmacies. Mebendazole inhibits growth, reproductive capacity, and motility of *C. elegans*. A risk assessment based on the control measures in the patient information leaflet for Mebendazole suitably adapted for laboratory work should be suitable and sufficient to control any risk. ◀