

INVERTEBRATES

Rat-tailed maggots and drinking water supply.



Characteristic features

The Rat-tailed maggot is the immature or larva of a Drone Fly that resembles a honeybee. These insects are $\frac{3}{4}$ inches long. Whitish larvae are different from other maggots in having a $\frac{1}{2}$ inch long "tail" that is used as a breathing tube when they are in the water. This tail acts like a snorkel, allowing the larva to breath air while submerged.

Life Cycle:

Pupa: enclosed in the hardened skin.

Larva: which are aquatic.

Egg: White oval egg less than 1mm long.

Adult: The drone fly.



Rat-tailed maggot larval stage

Maggots (Drone fly)

When fully grown the larva creeps out into drier habitats and seeks a suitable place to pupate. Development of the egg to adult takes about 2 to 3 weeks. The adult fly that emerges is harmless. It looks much like a honeybee. The adults are called Drone Flies and they are common visitors to flowers for pollination, especially in late summer and autumn. They do not remain around the breeding sites but do visit decaying odors where they may lay eggs.



Where to find Rat-tailed maggots

Rat-tailed maggots live in wet habitats, frequently in liquid manures, but also in other stagnant and polluted water. Large numbers can be present in almost any accumulation of stagnant water such as manure pits or lagoons where they feed on decaying organic matter. Toilet and floor drains are a good habitat from where they can find their way into washbasins and household pipes. They are occasionally found in toilets, on wet leaves and in natural and polluted streams They can also crawl along the ground.



H₂O



Rat-tailed maggots and human health

The maggots do not bite or sting, they are harmless and have not been found to carry diseases. The only situation in which they are harmful to humans is if someone inadvertently swallows larvae whilst drinking contaminated water. If the swallowed larvae survive, they may cause intestinal myiasis in humans.

Control strategies

If you find maggots in your drain or in the outlet of a bath or hand basin, pour boiling water or a quarter cup of bleach down this outlet to kill the maggots. Fix any leaking pipes, clean up any stagnant water that might be lying around and clean out drains and outlets as maggots need to feed off dirt such as pieces of food, hair and decaying matter in order to survive

The presence of maggots in household water is not associated with household systems, but is more likely to be related to an on-site water supply problem. It is impossible for maggots to survive in a pressurized system as they breathe through their tubes in shallow water and need organic matter to survive. Rand Water's treatment process removes any insects, including maggots in their larval form. The flocculation, sedimentation, filtration and chlorination treatment process is entirely effective in removing all pathogens and objects, down to microscopic size.

Visit www.reservoir.co.za for further information on water quality in your area.

