



# European foulbrood

*Melissococcus plutonius*

*A disease affecting colonies under stress*



## ABOUT

European foulbrood (EFB) is a brood disease found in all Australian states except for Western Australia and the Northern Territory.

EFB is a highly contagious disease that is capable of remaining viable in honey, wax and beekeeping equipment over several years. It is possible for hives to have an underlying EFB infection however the disease only becomes visible when the infected colony is under direct stress.

EFB infections begin when larvae ingest the bacteria *Melissococcus plutonius* in brood food or when larvae come into contact with infected nurse bees. The bacteria multiply in the gut of infected larvae and begin to compete with the larvae for food. Over time the infected larvae transform into a semi-fluid mass and will change colour from a pearl white colour to a yellow then brown colour.

Infection is also spread in the hive when nurse bees become contaminated as they go about removing dead larvae from brood cells, in turn spreading the infection to the healthy larvae through feeding activities.

EFB infections will weaken the strength of a colony, in turn making the hive more vulnerable to robbing from other hives.

Beekeepers can employ several techniques to manage EFB within hives. These include good colony management, implementation of a barrier system and selecting bees genetically for their hygienic behaviours.

As EFB is a stress related disease. Beekeepers with poorly performing hives should undertake a disease inspection and subsequent test on suspicious brood cells to assist in identifying infected hives.



Above: European foulbrood. Image: Rob Snyder, [beeinformed.org](http://beeinformed.org), [BeeAware.org.au](http://BeeAware.org.au). Top Left: Infected brood. Image: Rob Snyder, [beeinformed.org](http://beeinformed.org), [BeeAware.org.au](http://BeeAware.org.au).

## TAKE ACTION

Conduct brood inspections in your honey bee hives. Look for irregular brood patterns, dead or discoloured larvae, or ammonia like odour coming from the hive.

## CONTACT

For support and advice on pests and disease management, contact the Qld Bee Biosecurity Officer (BBO) on: 0436 858 838.

## ADDITIONAL INFORMATION

Scan the QR Code or click here for more information about EFB from the Biosecurity Queensland website.

