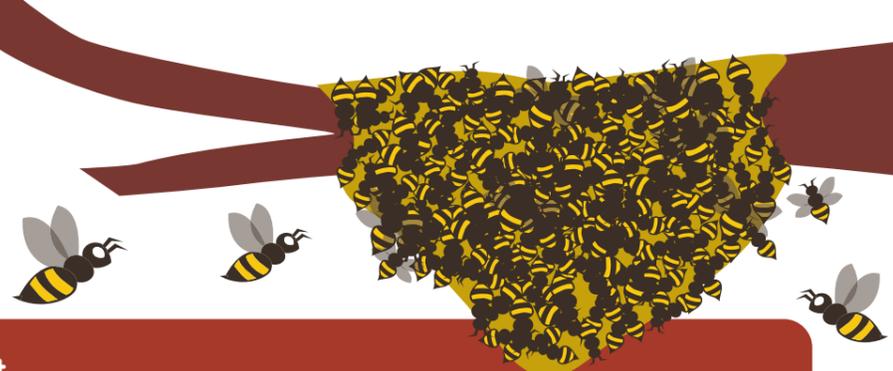


VARROA MITE



The Varroa mite, *Varroa destructor*, is the most serious threat to the western honeybee, *Apis mellifera*. Varroa is a parasite that feeds on the bee and spreads viruses. Untreated, colonies die in a few years.

Varroa Impact

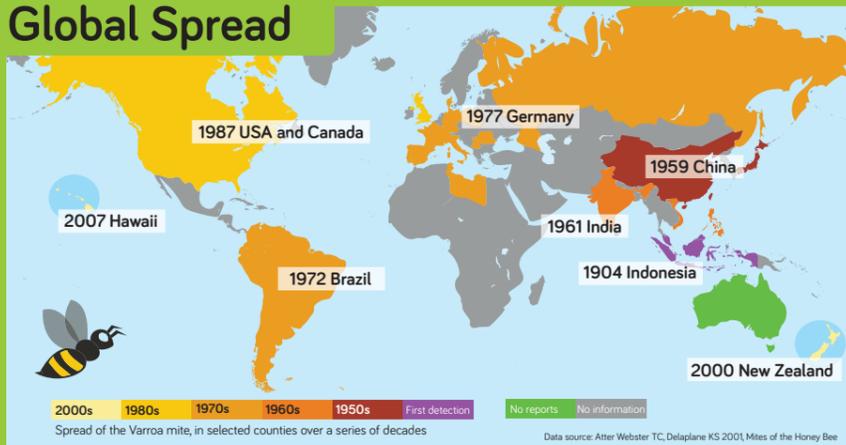


Female varroa lay their eggs in brood cells, especially drone brood cells. They feed off developing bees and impair normal growth.

Varroa spread viruses and amplify their effects. Deformed Wing Virus (DWV) is a typical sign of Varroa infestation. Other viruses, once thought insignificant, are also killing bees.



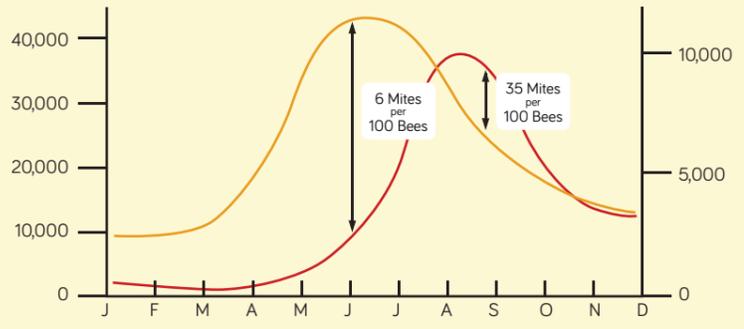
Global Spread



Since the early 1900s varroa has spread throughout the world. By 2016, Australia, one of very few countries that appeared to be varroa-free, seemed under threat.

BEES

MITES



Varroa populations keep growing at the end of the season even as the honeybee population declines. So treatment at the end of the honey flow and before winter preparations is essential.

Apiary spread



Varroa mites attach themselves to flying bees and spread with robber bees, drifting bees, swarms and migratory beekeeping. Varroa infiltrate colonies by mimicking the scents of bees. They even know when colony collapse is imminent and leave with the absconding bees to infest another colony.

Treatment, IPM and resistance



Varroa cannot be eliminated, but numbers can be controlled using effective and approved treatments that are safe for bees, honey, humans and the environment. Overuse of single treatments accelerates resistance, so alternating treatments with Integrated Pest Management (IPM) is essential.



Monitoring mite fall with varroa floors gives early warning of dangerous varroa infestation. In Europe, calculate the mite population from natural mite fall: multiply daily mite drop by 250-500 when no brood or 20-40 when brood is present. (Martin, 1998).

Year	Event
1904	leaves Java as <i>Varroa jacobsoni</i>
1960s	discovered in USSR
1970s	discovered in Europe
1980s	first generation treatments eg Apistan
1987	discovered in USA
1992	discovered in Britain
1996	role of viruses in Varroa impact realised
1990s	second generation treatments eg Apiguard
1990s	Parasitic Mite Syndrome term coined
2000	<i>Varroa destructor</i> recognised as different species to <i>Varroa jacobsoni</i>
2000	discovered in New Zealand