



Endemic Honey Bee Diseases and Pests in Western Australia

Certified list current as of July 2013

[Key: DAFWA – Department of Agriculture and Food, Western Australia]

The first honey bees (*Apis mellifera*) were successfully introduced to WA in 1841 via Mr F Helpman RN [Enquirer, Wednesday 15 September 1841; Peter Barratt (1999), The Immigrant Bees 1788 to 1898 Volume II, Peter Barratt publishing] though there is some speculation that William Hardey of Peninsula Farm beside the Swan River, 5 km east of Perth had a hive of bees in 1830 [Chambers SR, (1979) The Honey Bee, Agriculture in Western Australia 1829 – 1979, Editor: EH Burvill, p 248].

Disease/pest	Date Established	Notes	Notifier	Reference
Nosema (<i>Nosema apis</i>)	Prior to June 1894	“Dampness produces dysentery which lowers vitality of the surviving bees...keep your bees warm and dry”	John A Ayre Mel-Bonum Apiary	The Journal of the Bureau of Agriculture, p 92. Vol. 1 (6).
Lesser wax moth (<i>Achroia grisella</i>)	March 1897	“New plague”. The first official record. <i>Galleria</i> sp introduction date noted to be “sometime back”	Richard Helms (Govt biologist)	The Journal of the Bureau of Agriculture, p 1183. Vol. IV (6).
Greater wax moth (<i>Galleria mellonella</i>)	Prior to 1897 (see above)	Quindalup district. “Ravages of bee moth are just as bad as can be”	A Crawford	Journal of the Dept of Agric. of WA, p 81. Vol. 3 (1901).
American Foulbrood (<i>Paenibacillus larvae</i>) (AFB)	Prior to May 1897	“That in the opinion of this conference stringent measures should be at once taken by the government to stamp out foul brood in bees”	WA Horticultural Society	The Journal of the Bureau of Agriculture, p 1278. Vol. IV.
	Dec 1899	“Disease has spread so widely over WA and within the last 2 years made such a havoc amongst bees in several locations to destroy whole apiaries”		Journal of the Dept of Agric. of WA, Vol. 1 (1899-1900).

	Feb 1900	Proclamation of Contagious Diseases (Bees) Act, 1899		Journal of the Dept of Agric. of WA, p 50 & 66 Vol. 1 (1899-1900).
<i>Acarapis dorsalis</i> External mite	1966 (NZ 1960) (Europe 1922)	Surveys in Australia found the mite was endemic. Likely source: Queen bees imported from Europe during 1960s.	K Doyle (Harris, DAFWA)	i). Aust. Agric. Health & Quarantine Service, Dept of Primary industry correspondence, October 1986. ii) CSIRO Entomology (www.ento.csiro.au) verified as present.
<i>Acarapis externus</i> External mite	1966 (NZ 1960) (Europe 1922)	Surveys in Australia found the mite was endemic Likely source: Queen bees imported from Europe during 1960s.	K Doyle (Harris, DAFWA)	i) Aust. Agric. Health & Quarantine Service, Dept of Primary industry correspondence, October 1986. ii) CSIRO Entomology (www.ento.csiro.au) verified as present.
* <i>Acarapis</i> – ex Bulletin Apicole – Documentation Scientifique (A.S. Michael, no date on document): mites had been found on a shipment of bees from California to Australia in 1959. The samples were examined by specialists at the Commonwealth Institute of Entomology in London as being biometrically similar to subspecies <i>woodi</i> and <i>externus</i> (which are close, but the mites collected were external and not internal as is <i>A. woodi</i>).				
Quarantine Measure	11 Nov 1977 (still current)	Ban on bees & used equipment coming into Western Australia.	SR Chambers (DAFWA)	The Australasian Beekeeper Vol 79, p 120-121, Dec 15 1977.
Sacbrood (virus) SBV	July 1979	“Present in 90% of apiaries.... 20% economic loss” Isolated in Qld, NSW, Vic and SA in 1978. (No quarantine measures)	DAFWA (Alan C Kessell)	i) Animal Production Annual Report (DAFWA) June 30, 1980. ii) AC Kessell DAFWA file notes.
Chalkbrood (<i>Ascosphaera apis</i>)	April 1998	Declaration of infected area (Research apiary, South Perth) Trace-back source: contaminated pollen robbed by bees from drum imported by health food business in adjacent suburb of Shelley. At least 10% cost in production one year after incursion.	Robert Manning (DAFWA)	i). WA Government Gazette No.91, p 2327-2328 (May 1998). ii) Beeinformed Vol 3 (1) May 2004 (production loss) (Note: RL Peet Vet Path. AHL DAFWA Nov 1983 – imported pollen into health food shops – a great risk).
Small hive beetle (<i>Aethina tumida</i>) (SHB)	Sept 2007	Discovered in Kununurra, Declaration of infected area (eradicated from 2 infected south-west apiaries ex	Phil Sammut Allwest Apiaries	i). WA Government Gazette No. 81, p1551-1563 (May 2009). ii). Dr Rob Manning (2008) Small Hive Beetle Surveillance Report, Kununurra October 2008. DAFWA, 9 pp.

Kununurra). Trace-back source:
gama-sterilised hive material
(AFB contaminated) that became
contaminated with SHB in
Queensland ex Steritec Qld.
Confined to Kununurra, north-
Western Australia.

Inspections of beehives by the Western Australian Department of Agriculture and Food are made randomly throughout each year.

Western Australia remains free of European Foulbrood, *Nosema ceranae*, *Apis cerana* (Queensland only), *Braula coeca* (Tasmania only), *Varroa destructor*, *Varroa jacobsoni*, *Tropilaelaps clareae*, and *Acarapis woodi*.

The main beekeeping area of the south-Western Australia remains free of Small Hive Beetle.

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