

Update – American foulbrood (AFB) Minimisation Strategy 2020

An important component of the AFB Minimisation Strategy is honey testing for AFB spores. This testing has a dual role; (1) providing an ongoing yearly assessment as to whether the percentage of AFB positive samples is increasing or decreasing and (2) providing an effective tool in detecting AFB outbreaks by traceback of AFB positive honey samples to the hives from which the positive samples originated.

In 2020, 835 honey samples were tested for AFB spores at the Elizabeth Macarthur Agricultural Institute, Menangle. Of this number, 264 were for projects (incl. AFB Minimisation Strategy) and 117 samples were from interstate or overseas.

As part of the ongoing AFB Minimisation Strategy honey testing program, 122 honey samples were submitted by Hive and Wellness, and Superbee (Table 1). Honey sample testing is down on last year, due to the drought, bush fires and Covid 19.

The good news is that the percentage of AFB positive samples decreased from 48.3% in 2019 to 42.6% in 2020 (see Table 1).

Table 1. *Paenibacillus larvae* (AFB) spore culture results for bulked honey samples for the American foulbrood baseline/minimisation strategy testing

Result	Spore score	Number of samples for 2019 (% of total samples tested)	Number of samples for 2020 (% of total samples tested)
POSITIVE	3+	27 (12.9%)	12 (9.8%)
	2+	19 (9.1%)	10 (8.2%)
	1+	55 (26.3%)	30 (24.6%)
		Total 101 (48.3%)	Total 52 (42.6%)
NEGATIVE		108 (51.7%)	70 (57.4%)
TOTAL		209 (100%)	122 (100%)

Table 2 provides the results for NSW honey samples submitted for AFB spore culture excluding the AFB minimisation strategy, the Amateur Beekeepers' Association and project/special request honey testing. The percentage negative samples are similar to the AFB Minimisation Strategy testing results for 2020 and supports the reduction percentage in positive samples for 2020.

Table 2. *Paenibacillus larvae* (AFB) spore culture results for NSW honey samples, excluding project testing

Result	Spore score	Number of samples for 2020 (% of total samples tested)
POSITIVE	3+	47 (10.4%)
	2+	24 (5.3%)
	1+	123 (27.1%)
		Total 194 (42.7%)
NEGATIVE		260 (57.3%)
TOTAL		454 (100%)

With the implementation of the Code of Practice/ National Biosecurity Program and AFB honey testing, and diagnostics it is likely that the impact of AFB on the beekeeping industry will be reduced in NSW.

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