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Abstract – Insects and Plants

The Mealybugs Strike Back: the return of *Heliococcus summervillei* and Queensland pasture dieback

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Mealybugs were collected by W.A.T. Summerville (Entomological Branch, Queensland Dept. Ag.) during a 1920s pasture dieback event in the Cooroy district of Southeast Queensland. Undescribed at the time, this mealybug was implicated as the cause of the dieback characterised by yellow and purple colouration of leaves prior to death. Later, the mealybug was described as *Heliococcus summervillei* by H.M. Brookes in 1978; Pakistan specimens collected from sugar-cane were included in her description. *Heliococcus summervillei* was later associated with pasture dieback in New Caledonia from 1998-2003; as for the earlier Australian incident, mealybugs reduced in number due to apparently natural causes.

Recently, much of Queensland from the southeast to the northern tropics has experienced widespread pasture dieback reminiscent of early last century's incident in the Cooroy district; and late last century's outbreak in New Caledonia. Once again, mealybugs are implicated, with contemporary specimens differing slightly in their morphology from historical material; this lead to early suspicions that the latest material may represent a new species.

Here, we discuss historical and contemporary 'outbreaks' of *H. summervillei*, specifically regarding how this species relates to other *Heliococcus* species and to what extent their morphology varies across collections made almost 100 years apart.

Wednesday 4 December
11:00 – 11:15
Plaza Room 8