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***Disella rebeeveri* (Prostigmata: Eriophyidae): New distribution and host records**

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Xue and Zhang (2008) described *Disella rebeeveri* from leaves of *Kunzea ericoides* collected in the Waitakere Range, Auckland, New Zealand. There have been no further reports on this species. Our recent study of newly collected specimens from *Coprosma* as well as old material preserved in the New Zealand Arthropod Collection (NZAC), Auckland reveal new distribution and host records for this species, which are reported here.

***Disella rebeeveri* Xue & Zhang, 2008**

Material examined (all in NZAC): 10 females, from leaves of *Coprosma robusta* (Rubiaceae) with erineum, native forest, Auckland Botanic Gardens, Manurewa, Auckland, New Zealand, 6 November 2014, coll. N.A. Martin (with *Phyllocoptes coprosmae*); 5 females, from leaves of *Coprosma robusta* with erineum, Alice Eaves Reserve, Auckland, New Zealand, 7 February 2015, coll. N.A. Martin (with *Phyllocoptes coprosmae*); 6 females, from leaves of *Coprosma grandifolia* with erineum, Alice Eaves Reserve, Auckland, New Zealand, 7 February 2015, coll. N.A. Martin (with *Phyllocoptes coprosmae*); 40 females and 5 males, from underside of young leaves of *Schefflera digitata* (Araliaceae), Southern enclosure, Maungatautari Mountain Scenic Reserve, Hamilton & Waikato region, New Zealand, 27 February 2005, coll. N.A. Martin; 7 females, from rough underside of leaves of *Hebe stricta* (Plantaginaceae), Incline Track, Waitakere Ranges, Auckland, New Zealand, 11 May 2002, coll. N.A. Martin; 82 females, from rough underside of leaves of *Hebe salicifolia* (Plantaginaceae), Hinewai Reserve, Banks Peninsula, New Zealand, 1 November 2001, coll. N.A. Martin.

Distribution: This species was known only from the Waitakere Range, Auckland (Xue & Zhang 2008). Its distribution now extends southward to Manurewa (Auckland), Hamilton and Waikato on the North Island, and the Banks Peninsula on the South Island.

Hosts: Xue and Zhang (2008) recorded only females of *D. rebeeveri* from curly leaves of *K. ericoides* (Myrtaceae). Here we add five new host plant species belonging to three different families for this species. On *C. robusta* and *C. grandifolia* (Rubiaceae), it was found with *P. coprosmae*, which is known to produce erineum (Martin 2010); we noted that *D. rebeeveri* was more numerous than *P. coprosmae* among hairs on leaves. On *H. stricta* and *H. salicifolia* (Plantaginaceae), *D. rebeeveri* was found on the rough underside of leaves. On *S. digitata* (Araliaceae), *D. rebeeveri* was found on the underside of young leaves and males were also collected for the first time along with females. Only 1% of eriophyoid species are found on more than one family of plants (Skoracka *et al.* 2010). However, the four host families of *D. rebeeveri* belong to four unrelated plant orders! So this species is among the most polyphagous species in the superfamily Eriophyoidea.

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References

- Martin, N.A. (2010) *Coprosma* white erineum mite - *Phyllocoptes coprosmae*. *Factsheet: Interesting Insects and other Invertebrates*. Available from: <http://nzacfactsheets.landcareresearch.co.nz/Index.html> (last accessed 26 Feb. 2015).
- Skoracka, A., Smith, L., Oldfield, G., Cristofaro, M. & Amrine, J.W.Jr. (2010) Host-plant specificity and specialization in eriophyoid mites and their importance for the use of eriophyoid mites as biocontrol agents of weeds. *Experimental and Applied Acarology*, 51, 93–113. <http://dx.doi.org/10.1007/s10493-009-9323-6>
- Xue, X.-F. & Zhang, Z.-Q. (2008) New Zealand Eriophyoidea (Acari: Prostigmata): an update with descriptions of one new genus and six new species. *Zootaxa*, 1962, 1–32.