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Is there cryptic species diversity in *Apiomorpha strombylosa* (Tepper)?

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Apiomorpha is the most species-rich genus of gall-inducing scale insect, and it is specific to *Eucalyptus*. It is also one of the most chromosomally diverse animal genera on the planet, with diploid karyotypes ranging from 2n=4 to about 192. Here, we test species boundaries in one morphospecies, *A. strombylosa*, reported to have considerable chromosomal variation. Gullan, in her 1984 revision of *Apiomorpha*, noted some morphological variation and referred to the variants as “eastern” and “western” forms. Subsequently, these forms have been found to have different karyotypes, with most specimens of the eastern form having about 2n = 32 and most of the western form having about 2n = 50. In this study we focus on the western form, in which a novel karyotypic form (2n = 14) has been found in Western Australia. We use DNA sequencing, morphometrics, karyotypes and host use to determine whether *A. strombylosa*, as currently defined, comprises a species complex.

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