

Article



http://dx.doi.org/10.11646/zootaxa.3620.1.1 http://zoobank.org/urn:lsid:zoobank.org:pub:7C45A9A7-BFB2-4FF0-A5FA-CF461BABF5FE

New species of *Drymopsalta* Heath Cicadas (Cicadidae: Cicadettinae: Cicadettini) from Queensland and Northern Territory, Australia, with overview of genus

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Abstract

Three new species are described in the genus *Drymopsalta* Ewart, previously known only from *D. crepitum* Ewart and *D.* daemeli Distant. The three new species occur in Southern Queensland and Northern Territory. D. wallumi sp. nov. occurs along coastal S.E. Queensland, whereas D. hobsoni sp. nov. is restricted to the Bringalily State Forest, near Inglewood, southern inland Queensland. D. acrotela sp. nov. is found in the Litchfield National Park and other locations near Jabaluka, Cahills Crossing, E. Alligator River and Nourlangie, all across the northern Northern Territory. D. crepitum occurs on the Cape York Peninsular extending into the southern Gulf, while D. daemeli occurs in two localised regions in central coastal N.S.W. Each of the species inhabits heath vegetation, often spilling-over into adjacent tree foliage. The species of *Drymopsalta* are small and inconspicuous cicadas (<15 mm body length) with relatively high frequency songs (~15 to 22 kHz). The temporal structures of the normal calling songs follow a similar pattern in each species, consisting of the emission of short chirps (comprising 2–16 ticks). Between the chirps are emitted one (D. wallumi, D. hobsoni, D. acrotela), two (D. daemeli) or 1–9 (D. crepitum) intervening single ticks. The species can be distinguished by the timing and the number of these single ticks relative to the adjacent chirps with the notable exception of D. hobsoni and D. acrotela. The calling songs of these two allopatric species are indistinguishable, an unusual feature in Australian cicadas. Two additional song variants are described, a more unstructured chirping song without intervening single ticks observed in each of the species except D. crepitum, and periodic extended buzzing echemes emitted within the calling songs (excepting the *D. wallumi* song).

Key words: Cicadettini, *Drymopsalta*, cicadas, taxonomy, heathland cicadas, song analyses, song specificity, song recordings, Queensland, Northern Territory

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