



***Carex kirkii* s.l. Petrie (*Carex* section *Inversae* Kük., Cyperaceae). Two new rare species from the Eastern South Island of New Zealand.**

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Carex section *Inversae* in New Zealand is composed of 11 species and is found in a variety of habitats, including, moraine outwash surfaces, grasslands, and alpine herbfield. While assessing herbarium specimens for a new flora of *Carex* subgenus *Vignea*, including the three varieties of *Carex kirkii*, it became apparent that many specimens did not match the types in the latter. Field survey was initiated to collect samples, specifically the two varieties described by George Kükenthal in 1909 which have rarely been collected, *C. kirkii* var. *elatior* and *C. kirkii* var. *membranacea*. A PCO analysis of morphology suggests the former is a hybrid between *C. kirkii* var. *membranacea* and *C. trachycarpa* Cheeseman. Secondly, comparison of specimens to types suggests that *Carex kirkii* var. *membranacea* is the correct name to apply to plants in montane areas of Western Nelson, Canterbury and Otago and should be raised to specific rank. Thirdly one new species is described, from moraine outwash surfaces of the eastern South Island, first collected by Thomas Cheeseman in 1893 in the Clarence Valley, Marlborough and overlooked for 130 years. This new species is assessed as critically rare in the New Zealand Threat Classification and *C. kirkii* var. *membranacea* is assessed as Nationally Vulnerable.

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