A NEW SPECIES OF CAREX (CYPERACEAE: CARICOIDEAE) FROM SOUTH-EASTERN AUSTRALIA

by

K. R. THIELE*

ABSTRACT


INTRODUCTION

Examination of material determined as *Carex appressa* R.Br. in MEL and CBG has revealed that a number of specimens from Victoria and south-eastern New South Wales previously referred to that name constitute an undescribed species which is here named *C. incomitata*.

TAXONOMY

*Carex incomitata* K. R. Thiele, sp. nov.


_Caricis appressae_ affinis sed rhizomate repenti, habitu diffuse caespitoso; inflorescentia brevi congesta, spiculis ad basim multorum flosculorum femineorum, ad maturitatem utriculorum late reflexorum, masculae sectionis terminalis inconspicuae, utriculis omnino tenuerit papyraceis, ambo extremitates versus aequaliter contractis, laete viridibus, ad maturitatem denigricans differt.

TYPE COLLECTION:


_Perennial. Rhizome_ stout, short-creeping, 2-4 mm diameter, covered with persistent dull brown papery scales. _Leaves_ to 85 cm x 8 mm, pale verdant green, rather thin and lax, strongly but finely retrorsely scabridulous at least distally on the margins and adaxial surface of the major nerves; internerve surfaces and minor nerves smooth to minutely tuberculate; leaf-sheath pale, transversely septate, smooth and glossy adaxially, smooth to minutely tuberculate abaxially, with a hyaline membranous margin. _Culms_ erect to inclined, (26-)50-70(-90) cm tall, rather slender, acutely trigonorous with retrorsely scabridulous angles at least towards the apex. _Inflorescence axis_ unbranched or with few closely appressed basal branches to 20 mm long, the axis and branches densely covered with numerous, congested, sessile, short, ovoid spikes, the whole forming a cylindric or narrow-oblong spike-like panicle (2.4-)5-8(-10) cm long x (5-)6-8(-10) cm wide, sometimes somewhat lobed or interrupted at the base. _Bracts_ subterminating the panicle branches and spikes glumaceous or the lowermost filiform-scabrid, to 10 mm long. _Spikes_ androgynous; axis 1.0-1.5 mm long, bearing 5-12 female florets below and 6-10 male florets above. _Male glumes_ 2 mm long, ovate, obtuse or truncate-erose at the apex, with a pallid greenish one-nerved costa and hyaline margins suffused apically with reddish-chestnut. _Female glumes_ 2.5 mm long, two thirds the length of the mature utricle, similar in shape and colouration to the male. _Utricle_ (2.4-)2.5-2.6(-2.7) mm long, (1.4-)1.5-1.6(-1.8) mm wide, plano-convex to lenticular in section, elliptic.

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Fig. 1. *Carex incomitatus*. a — habit, x 0.5. b — spikelet, x 3. c — utricle (1, abaxial; 2, adaxial; 3, T.S.), x 15. d — nut, x 15. e — female glume, x 18. f — male glume, x 18. g — lower bract, x 14. h — T.S. culm, x 7. j — leaf, portion of abaxial surface, x 14. *Carex appressa*. j — utricle, abaxial, x 15. k — T.S. utricle, x 15. a—i, from the holotype.
narrowing evenly and symmetrically to both ends, short-beaked, spiny-scabrous in the upper third, papery throughout but slightly ribbed on the margins, vivid green becoming shining black at maturity; abaxial surface 6-7 nerved; adaxial surface 4-5 nerved but the nerves sometimes incomplete. **Style-branches 2. Achene obovate, short-beaked, lenticular in transverse section.**

**DISTRIBUTION:**

Apparently widespread and frequent in montane eastern Victoria and south-eastern New South Wales, with isolated occurrences as far north as the Warrumbungle Range. A single record for the Western District of Victoria (MEL 536393) is anomalous and further collecting is needed to evaluate the significance of this record.

**HABITAT:**

Characteristically in open grassy woodland and forests, usually on well-drained slopes and ridge-tops. In this respect it differs from other species of *Carex* in the region.

**SELECTED SPECIMENS EXAMINED:**


*New South Wales* — Cave Creek, 18 miles NNE, of Kiandra, 11.xii.1969, R. Coveny 2606 & A. Rodd (MEL 1527686). Batlow Hill, 0.5 km W., 3.5 km N. of Batlow P.O., 14.xii.1980, K.R. Thiele 188 (CBG 8100631). Little Forest Plateau, 16 km NW. of Milton, South Coast, 35°12'E., 150°19'E., alt. 300 m, 11.xii.1975, I.R. Telford 4221 (CBG 8202264).

*Australian Capital Territory* — Gudgenby Nature Reserve, Orroral River crossing on Orroral Road, at picnic reserve, 35°40'S., 148°59'E., alt. 880 m, 23.x.1980, E.M. Canning 5020 & D. Verdon (CBG 8007982).
NOTES:
The epithet is derived from the Latin for “unaccompanied”. C. incomitata is characteristically found in a habitat from which other species of Carex are absent. C. incomitata belongs in Carex subgenus Vignea, along with C. appressa with which it has been confused. It differs from that species principally in the characters given in Table 1.

Table 1. Principal characters distinguishing Carex appressa and C. incomitata

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<tr>
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<th>Carex appressa</th>
<th>Carex incomitata</th>
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<tr>
<td>Utricle</td>
<td>inflated and corky in the lower half, abruptly contracting to the insertion, dull brown at maturity.</td>
<td>membranous and papery throughout, evenly and symmetrically tapering to both ends, bright green turning black at maturity.</td>
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<tr>
<td>Spikelets</td>
<td>basal female florets usually few, inconspicuous, the terete distal male section clearly projecting at maturity.</td>
<td>basal female florets many, widely reflexed at maturity and hiding the distal male section from view.</td>
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<tr>
<td>Inflorescence</td>
<td>often more than 12 cm long, sometimes rather loose.</td>
<td>never more than 12 cm long, always congested.</td>
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<td>Habitat</td>
<td>often large, dense, well-formed tussocks.</td>
<td>rather diffuse, shortly-rhizomatous tussocks.</td>
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<td>moist places in swamps, soaks and streambanks.</td>
<td>hill slopes and ridge-tops in grassy forest and woodland.</td>
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Specimens of Carex incomitata have usually been referred to Carex appressa R.Br. forma minor Kükenthal. Examination of apparent type material (MEL 625287) of this latter taxon held at MEL reveals it to be clearly similar to typical Carex appressa in the possession of inflated, corky utricles. Carex incomitata, with papery utricles, differs markedly.

Although Carex incomitata generally resembles Carex appressa it may not be taxonomically close to that species. Until a comprehensive systematic treatment of at least the Australian species of Carex is prepared the affinities of this new species remain in doubt.

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