

ON TRITHURIA FILAMENTOSA.

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The genus *Trithuria* has hitherto been represented by one species only. Like the order to which it belongs, it is probably the remnant of an ancient stock that flourished in past ages. It can hardly be said that the type is being exterminated, in the struggle for existence its peculiar locality is hardly otherwise occupied, it seems rather to be dying out from some more obscure cause, a senility that renders it unable to adapt itself to small, gradual change.

All *Centrolepidæ* of the present day are small and herbaceous. The characteristic pistal remains soft, and the seeds are not clearly distinguishable from those of adjoining orders, so there is little hope that we shall ever trace their ancestors in leaf-beds. But their geographical distribution, confined as it is to regions supporting an ancient terrestrial flora, and the small number of species, together with their clear differentiation from adjoining types, mark them as ancient survivors rather than recent productions.

The genus *Trithuria* itself is of exceptional interest, in so far that the ovulary has somewhat the form of that organ in the neighbouring order *Restiaceæ*, apparently indicating a philogenetic relationship, but similarity ceases here. The habits and tissues, the inflorescence and floral members have a type of their own. The late Baron von Mueller, on the strength of this apparent similarity of ovaries, combined the two orders, but his view is not generally accepted.

The plant to which I now refer grows in abundance in pools on the mud flats at the head of the Broad River on the Field Range. It is certainly very closely allied to *Trithuria submersa*, Hook., but differs in important details from the type as described and figured in Hooker's *Flora Tasmaniae* and all forms in Herb. Mueller. The erect bracts give a *Centrolepis*-like appearance to the inflorescence, and the stigmatic branches are long and numerous, forming a conspicuous pink brush when the plant is in flower. The filaments also, instead of being short, are greatly lengthened, so that the anthers are remotely protruding. Again, unlike *T. submersa*, stamens are not freely interspersed amongst carpels, but are absent from those flower heads which bear many carpels, and where present are usually only two in number and accompanied in the head by but few carpels. Finally, the fruit, instead of being somewhat trigonous, is elliptical or oval, with three inconspicuous ribs.

Owing to the kindness of Mr. Leuhman I was permitted to examine forms from von Mueller's collection, and amongst

them was one from Tasmania bearing the erect bracts of this plant, but with the short stigmas and filaments and interspersed stamens of the type.

Trithuria filamentosa, n.s. Cæspitose and tufted, leaves linear, acute pale green, 1—2 in. long. Scapes slender, usually shorter than the leaves. Bracts 2—5 erect, enclosing the flowers 2—2½ lines long. Stamens, usually 2, confined to heads with but few carpels, filaments filiform 5—6 lines long, anthers linear obtuse, nearly 1 line long. Carpels numerous in the purely female heads, stipitate, nearly globose, angles obsolete, stigmatic branches mostly 4—6, filiform 2—3 lines long. Fruit elliptical, hardly differing from young carpel.

Common in marsh at the head of Broad River, Field Range.



L.R.
del.

Frittuaria filamentosa, Rob.