This well-marked form is sufficiently distinguished from the type by the petioled leaves, compressed nuts, and the peculiar habit. In some respects it approaches *M. spathulata*, Forst., but diverges in the long petioled radical leaves, the sessile cauline leaves, broader calyx lobes and sessile flowers which are always axillary, never given off from below the leaves. As with most forms belonging to the genus, it varies considerably in the amount of hairiness; but the hairs, however scattered, are invariably appressed.

EXPLANATION OF PLATE XXVII.

- 1. Brachycome thomsonii, nat. size.
- 2. Floret of the ray.
- 3. Floret of the disc.
- 4. Achene of the disc, all magnified.

ART. XXXIV.—Notice of the Discovery of Amphibromus in New Zealand, with Description of a new Species. By T. Kirk, F.L.S.

[Read before the Wellington Philosophical Society, 13th February, 1884.]
Plate XXVIII.

On my last visit to the Waikato district I had the pleasure of discovering an undescribed species of *Amphibromus*, a genus hitherto supposed to be monotypic and restricted to Australia: my specimens are in a somewhat advanced condition, but after waiting for a lengthened period in the futile hope of procuring perfect examples, I deem it advisable to publish a description without further delay.

The nearest allies of Amphibronus in the New Zealand Flora are Trisetum and Danthonia: the former is readily distinguished by the spikelets consisting of 2 or 3 flowers only: the latter by the tufted hairs on the back of the flowering glume, and especially by the position of the awn, which is terminal, springing from between the lobes of the glume. In Amphibronus the spikelets consist of several flowers, the awn is strictly dorsal, adherent with the flowering glume for the greater part of its length, and the glume is destitute of tufted hairs on the back.

Amphibromus fluitans, n. s.

Culms floating or procumbent, glabrous, 12"-18" long, rooting at the nodes, leafy; leaves slightly scabrid, flat, ligule laciniate. Panicle 1"-2" long, partially included in the loose sheath, simple, or with one or two short distant branches, lax, rhachis and pedicels scabrid, slender; spikelets



AMPHIBROMUS FLUITANS. T.Kirk, n.s.

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pedicellate 5-7 flowered, faintly pubescent; outer glumes unequal, one-third the length of the spikelets; flowering glume more than twice as long as the outer glume, 5-nerved, bifid, awn dorsal springing from near the base of the glume, free at its apex, scabrid, not twisted, palea equalling the flowering glume, with 2 stout ciliated nerves, truncate, the apex and upper margins ciliated; caryopsis free.

Hab. North Island: in shallow waters, margins of the Waihi Lake and Creek.

Stamens 3, lodicules narrow, acute; stigmas 2, minute, ovary loosely invested by the palea. Flowering glume with a few short hairs at the base. Pedicels varying from $\frac{1}{4}''-1\frac{1}{2}''$ in length; occasionally two or more pedicels spring from the same point, but in cases of this kind one pedicel is greatly abbreviated.

Our plant is readily distinguished from all other indigenous grasses by its fluitant habit; although in very shallow water it is subcrect, yet as a general rule little more than the panicle is elevated above the water. Owing to the rhachis of the spikelet being articulated below each flower, the glumes fall away almost immediately after the extrusion of the panicle from the sheath, leaving only the naked pedicels, so that there is but little to attract attention to the plant, which may easily be passed unnoticed.

Amphibronus fluitans is usually if not invariably cleistogamous, fertilization being effected before the panicle is extruded: in fact extrusion is often delayed until the grain is nearly matured. I suspect that the stamens are not always developed in the uppermost flowers of each spikelet, but the flowers must be collected in an earlier state, before this point can be positively determined.

Our plant differs from the Australian species A. neesii, Steudel, in the procumbent habit, shorter leaves, smaller panicle, and straight awn. A. neesii is found in all the Australian Colonies except Queensland, and attains its greatest luxuriance in moist situations.

EXPLANATION OF PLATE XXVIII.

- 1. Amphibromus fluitans, natural size.
- 2. Flowering glume, lateral view.
- 3. Palea, front view.
- Caryopsis, all magnified.