

Notes towards an Excursion Flora: *Amphibromus fluitans* (Poaceae)

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In the new Grass-Flora (Edgar & Connor 2000) this Critically Endangered native grass is scarcely brought forward: it is not illustrated, only a few localities are referred to, and the northernmost collections are not cited.

Amphibromus fluitans Kirk, *T.N.Z.I.* 16: 374, pl. 28 (1884)

Perennial, semi-aquatic, forming loose grey-green mats, branches ("stolons") extravaginal, mostly basal, shoots incl. infl. to c. 40 cm long; leaf blades to c. 12 x 0.3 cm, tapering to sheath apex; ligule c. 4-7 mm long, tapering to a subacute tip; panicle loose, to 13 cm long, erect, often enclosed in uppermost leaf-sheath (where the spikelets may be entirely cleistogamous); spikelets 3-6-flowered (in Australia apparently 6-10-fl), to c. 2.5 cm long (incl. awns), breaking up below the lemmas; glumes persistent, the upper one slightly exceeding the lower; lemma 5 mm long, strongly 7-nerved, 2(-5)-fid at apex, the awn arising from c. halfway up lemma, ± straight, obscurely twisted, scabridulous; palea slightly shorter than lemma; callus rounded, short-hairy.

Distribution: Northland (e.g. Ninety Mile Beach and Karikari peninsula; P. J. de Lange *pers. comm.*), Great Barrier Island, near Waiuku and south to Aotea Harbour, Waikato Lakes district and from there southwards to Lake Tekapo. See Ogle (1987) for other localities. Also native to Australia (New

South Wales, Victoria and Tasmania), where it is said to be rare.

Ecology: A sporadically-distributed plant of moderately fertile wetland shallows (Ogle 1987). Most collections come from the edges of dune-lakes on the west coast of the North Island, but the plant is also known from several montane swamps in the central North Island mountains, to c. 900 m a.s.l. It grows well at the A.R.C. Botanic Gardens, Manurewa, in a relatively dry site.

Notes: Thomas Kirk discovered *A. fluitans* near Huntly, at Lake Waahi (often miscalled "Waihi"). His article has an amateurish but not inaccurate sketch of the plant done by his fifth child, Lucy May Kirk.

Kirk noted that the spikelets tend to break up soon after the panicle becomes exerted "so that there is but little to attract attention to the plant". In fact the pair of glumes persist at the apex of the panicle branches (see Fig. 1).

Vegetative pieces might easily be misidentified as creeping bent (*Agrostis stolonifera*). However, this has both intra- and extra-vaginal branching and a leaf blade that it tends to be wider than the sheath. Its ligule is similar to that of the *Amphibromus* in being a rather long and conspicuous membrane but tends to be relatively broad at the apex and splits to become deeply lacerate.

Selected specimens

Gt Barrier I., Tryphena-Claris Rd, 36°15'S 175°28'E, P. J. de Lange, 20 Nov 1989 [habitat now destroyed, P. J. de L. *pers. comm.*], AK 199925;

Karioitahi, nr Waiuku, 37°17'E 174°41'E, H. Carse, 25 Nov 1899, WELT 68460;

Lake Whangape, "Opuatia Swamp", 37°26'S 175°04'E [S13 929164], "floating turf at lake inlet", P. J. deLange, 17 Feb 1990 AK 202187;

Aotea Harbour, Makaka Road, 37°57'S 175°28'E, "short turf around dune lakes", P. J. de Lange, 3 Apr 1990, AK197805;

Pureora Forest, Waihora lagoon, "scattered round edge of lagoon", G. Reid, 13 Feb 2000, AK 245590;

Cult. ex "Maher's Swamp" [nr Barrytown], 42°11'S 171°19'E, P. J. de Lange, 5 Jan 1990, AK 211089.

References

Edgar, E. & Connor, H. E. 2000. Flora of New Zealand. Vol. V (Gramineae). Manaaki Whenua Press Lincoln.

Ogle, C. 1987. A rarely seen native grass, *Amphibromus fluitans*. *Wellington Botanical Society Bull.* 43: 29-32.

Fig. 1. (opposite page) Whole plant (photocopy) x 0.7; ligule x 30; spikelet x 4; glumes x 30. Based on Cheeseman, New Plymouth, Jan 1885, AK 200024.



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