A NEW JUNCUS FROM NEW GUINEA (JUNCACEAE)

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During the recent Star Mountains Expedition, 1975, (*) a Juncus was collected which appears to represent a new species, apparently closest related to Juncus balticus Willd. s.l.

Juncus nupela Veldk., sp. nov.

Junco baltico Willd. s.l. proximus ut videtur. Cataphylla straminea, obtusa, non mucronata. Caules aphylli, subtiliter striati, sordide opaco-virides, subcomplanati, leniter torti, medulla evanescente pseudo-septate in sicco. Bractea infima elongationem caulis simulans, inflorescentia ergo pseudo-lateralis, bractea 0.2—0.5-plo breviora, pauciflora (circa 6). Tepala 5.5—5.75 mm longa, subaequalia, acutissima, dorso viridia, lateribus castaneis, marginibus albis. Stamina 6, tepalis 0.3—0.4-plo breviora, antheris filamentibus circa quadruplo longioribus. Ovaria triseptata. Fructus ignoti.

Typus: Veldkamp 6369 (L, holo; isotypi ad distribuandi).

Perennial; culms solitary or in small tufts from a subterraneous rootstock, to 60 cm by I—I.5 mm and elliptic in Ø, finely striate and slightly twisted, dirty dull-green, pith continuous, but slightly septate after drying. Cataphylls c. 3, straw-coloured, finely nerved and hardly shiny, obtuse, not mucronate. True leaves absent. Lowest bract continuous with the stem, 5—8.3 cm long, inflorescence hence pseudo-lateral, I—3.3 cm long, 0.2—0.5 times as long as the bract, few-flowered (usually c. 6), erecto-patent, primary branches up to 15 mm long, usually 3, each with I—3 flowers. Flowers prophyllate; prophylls 2. Tepals 5.5—5.75 mm long, subequal, very acute, midrib green, sides castaneous, margins white. Stamens 6, 0.3—0.4 times shorter than the tepals. Anthers 1.6—1.8 mm long, 4—4.5 times as long as their filaments which are shortly united at base. Ovary triseptate, style c. 1 mm long, narrowly cylindric. Fruits unknown.

D i s t r i b u t i o n: Papua New Guinea, Star Mountains, Tel Basin, Camp 2. 3000 m. Bank of rivulet in tall-grassland, rhizome buried in loamy clay. Locally common, but only seen here.

Note: No match could be found for these plants. They generally key out with J. beringensis Buchenau and J. yokoscensis (Fr. & Sav.) Satake (J. balticus var. japonicus Buchenau), and with J. inflexus L. in the Flora Malesiana, from which species they are quite different (see Table I).

As no well-developed ovules could be found a hybridogenous origin might be postulated. However, no other *Juncus* was observed by me here or elsewhere in the Star Mountains.

LITERATURE

BACKER, C. A. 1951. Juncaceae. In Fl. Mal. Ser. I, 4: 210—215. Groningen. BUCHENAU, F. 1906. Juncaceae. In Engler, Pfl. R. 25: 1—284. Leipzig. OHWI, J. 1960. Flora of Japan: 274—278. Washington, D.C.

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TABLE 1

| J. nup | J. nupela | J. beringensis | J. yokoscensis | J. inflexus |
|-------------------|------------------------|-----------------------------------|--------------------------------------|----------------------------|
| cataphylls | straw, dull | castaneous, shiny | castaneous, shiny (n.v.) | castaneous to black, shiny |
| stems | finely striate | finely striate | finely striate | distinctly ribbed |
| lower bract | 5—8.3 cm, 2—5×infl. | 2—4 cm, about as long as infl. | 5—10 cm, sometimes longer than infl. | 15—20 cm, 1.5—5×infl. |
| inflorescence | few- (usually 6-) | 2—6-flowered, | many-flowered, | many-flowered, |
| | nowered, lax | lax | dense | lax to dense |
| tepals | 5.5—5.75 mm | 5—6 mm | 4 —5 mm | 3.5—5 mm |
| stamens/tepals | 0.3—0.4× | o.67× | 0.5—0.75× | c. 0.5× |
| anthers/filaments | 4-4.5× | 3-4× | žę× | c. 1× |
| ovary | triseptate | triseptate | triseptate | trilocular |
| | | | | |