# 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, apparencly 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 o.2-0.5-plo breviora, paucifora (circa 6 ). Tepala $5.5-5.75 \mathrm{~mm}$ 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 $1-\mathrm{I} .5 \mathrm{~mm}$ and elliptic in $\varnothing$, finely striate and slightly twisted, dirty dull-green, pith continuous, but slightly septate after drying. Cataphylls c. 3, straw-coloured, funely nerved and hardly shiny, obtuse, not mucronate. True leaves absent. Lowest bract continuous with the stem, $\mathrm{s}-8.3 \mathrm{~cm}$ long, inflorescence hence pseudo-lateral, $\mathrm{I}-3.3 \mathrm{~cm}$ 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 $\mathrm{r}-3$ flowers. Flowers prophyllate; prophylls 2. Tepals $5.5-5.75 \mathrm{~mm}$ long, subequal, very acute, midrib green, sides castaneous, margins white. Stamens $6,0.3-0.4$ times shorter than the tepals. Anthers $1.6-\mathrm{I} .8 \mathrm{~mm}$ long, 4-4.5 times as long as their filaments which are shortly united at base. Ovary triseptate, style $c$. I mm long, narrowly cylindric. Fruits unknown.

Distribution: 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. 195r. Juncaceae. In Fl. Mal. Ser. I, 4: 210-215. Groningen.
Buchenau, F. 1906. Juncaceae. In Engler, Pfi. R. 25: 1-284. Leipzig.
Ohwi, J. 1960. Flora of Japan: 274-278. Washington, D.C.
TABLE I

|  | 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 | $\begin{aligned} & 5-8.3 \mathrm{~cm}, \\ & 2-5 \times \text { inf. } \end{aligned}$ | 2-4 cm, about <br> as long as inf. | 5 - 10 cm , sometimes longer than inf. | $\begin{aligned} & 15-20 \mathrm{~cm}, \\ & 1.5-5 \times \mathrm{inf} . \end{aligned}$ |
| inflorescence | few- (usually 6 -) flowered, lax | 2-6-flowered, lax | many-flowered, dense | many-flowered, lax to dense |
| tepals | $5.5-5.75 \mathrm{~mm}$ | $5-6 \mathrm{~mm}$ | 4-5 mm | $3.5-5 \mathrm{~mm}$ |
| stamens/tepals | $0.3-0.4 \times$ | $0.67 \times$ | $0.5-0.75 \times$ | c. $0.5 \times$ |
| anthers/filaments | 4-4.5× | 3-4× | $5-6 \times$ | c. $1 \times$ |
| ovary | triseptate | triseptate | triseptate | trilocular |

