



## *Cenchrus caliculatus*

### Common Name(s):

Large Burr Grass, Devil Grass, Owee Grass

### Current Threat Status (2012):

At Risk - Naturally Uncommon

### Distribution:

Indigenous. In New Zealand known from Raoul Island (Kermadec Islands group) only. Formerly widespread across the Pacific, now very rare or extinct throughout most of its former range

### Habitat:

Strictly coastal. In New Zealand known only from rocky bluffs, associated talus and from beach sands in one small part of Raoul Island. Elsewhere in the Pacific it has been recorded growing on basalt rock exposures both inland and on the coast, on calcarenite, uplifted coral and coral sand.

### Features\*:

Robust, through somewhat lax, spreading, clump-forming grass arising from a stout, woody rhizome; culms trailing and rooting freely from lower nodes. Branching initially extravaginal becoming intravaginal. Leaf-sheath longer than internodes, firm papery, keeled, smooth, minutely scabrid on narrow membranous margin and on ribs below collar. Ligule 1.0-1.5 mm, truncate with a densely ciliate rim. Leaf-bade 70-200 x 4-9 mm, linear-lanceolate, rounded-truncate at base, flat, firm, undersides smooth, upper surface minutely scabrid on ribs; margins somewhat thickened, minutely scabrid, tapering to a long acuminate apex. Culm 700 x 2-2.5 mm diameter, terete, more or less angled, internodes minutely pubescent-scabrid on ridges below panicle. Panicle 100-250 x 15 mm, spicate; rachis triangular, slightly winged, densely minutely pubescent-scabrid, bearing ovoid clusters of 1-3 spikelets, hidden amongst bristles and densely, spirally arranged along rachis; clusters 7-10 x 4-7 mm, including involucre of stiff bristles, at first appressed, finally borne at right angles to rachis; bristles retrorsely barbed, very variable in length, 0.5-11.0 mm, outermost smaller, terete, inner more planoconvex with margins densely softly long-ciliate, one bristle in each cluster usually exceeding the others, Spikelets 5-6 mm, 2-flowered, < inner bristles, sessile, glabrous, light green to almost colourless. Glumes hyaline; lower 2-4.5 mm, 1-nerved, upper 4-5 mm, 5-nerved. Lower floret with lemma 4.8-6.0 mm, 5-nerved, scabrid; palea keels ciliate, interkeel minutely hairy, margins scabrid; anthers 1.5-2.0 mm, brown with thick orange-yellow filaments. Upper floret with lemma 5.0-5.5 mm, 5-nerved, finely scabrid-papillose; palea finely scabrid-papillose; anthers as in lower floret. Seed 2.2-2.7 mm, more or less ellipsoid.

### Flowering:

November - May

### Fruiting:

December - September

### Threats:

Unclear. This very large grass has declined markedly over the last 40 years, and is now extinct or scarce over large parts of former range. No one is exactly sure why (W. R. Sykes pers. comm.).

### \*Attribution:

Description modified from Edgar and Connor (2000)

### References and further reading:

Edgar, E.; Connor, H.E. 2000: Flora of New Zealand. Vol. V. Grasses. Christchurch, Manaaki Whenua Press. 650 pp.

Thorsen, M. J.; Dickinson, K. J. M.; Seddon, P. J. 2009. Seed dispersal systems in the New Zealand flora. Perspectives in Plant Ecology, Evolution and Systematics 11: 285-309

### For more information, visit:

[http://nzpcn.org.nz/flora\\_details.asp?ID=434](http://nzpcn.org.nz/flora_details.asp?ID=434)



**Caption:** Ex. Boat Cove, Raoul

**Photographer:** Gillian Crowcroft



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