Aciphylla dieffenbachii

Common Name(s):

Dieffenbach's speargrass, soft speargrass, coxella

Current Threat Status (2012):

Threatened - Nationally Vulnerable

Distribution:

Endemic to the Chatham Islands where it is known from Chatham, Pitt, Mangere, Little Mangere, South East (Rangatira) islands and some of the Murumuru stacks and islets. It has also been deliberately introduced to Native Island and Ernest Islands off Stewart Island.

Habitat:

Strictly coastal. Former habitat preferences unclear. Now only known from the Chatham (Rekohu) Island from steep, usually south facing, cliffs, rock scarps, ledges and colluvial slopes. It is usually found on basalt rather than schist rock substrates. On the outer islands, particularly those free of browsing animals it occupies similar habitats but can also be found in Poa chathamica Petrie swards, and amongst petrel burrowed ground.

Features*:

Tufted, dioecious, perennial with extremely stout, napiform taproot. All parts exuding white, sticky latex when damaged. Leaves glaucous, flaccid, up to 0.7m long. Petiole broadly sheathing near lamina junction, furnished on either side by blunt lobes. Leaf lamina 150–400 × 100–300 mm. Primary pinnae 4–7 pairs, segments up to 90 × 5 mm, linear, flaccid, apices bluntly mucronate. Inflorescence up to 1.0×0.6 m diameter, rather stout, almost woody. Umbels numerous, subpaniculate. Peduncles rigid, stout, 50-150 mm long. Primary bracts pinnatisect with broad base. Male umbels with up to 15 rays, 10 mm long, slender; female umbels similar but with 3-6 rays. Involucral bracts linearlanceolate, acuminate. Flowers golden-yellow. Male flowers with distinct triangular acute calyx-teeth; petals 2 mm long, oblong to ovate-oblong. Female calyx-teeth narrowly triangular, subacute; petals 1.5 mm long, obovate. Fruit 15 × 10 mm, golden yellow maturing light brown-grey, dorsally flattened, splitting at maturity into 2 more or less equal mericarps, these 2-3 winged, wings up to 3 mm wide.

Flowering:

Fruiting:

November - February

January - June

Threats:

Domestic stock and feral mammals are the prime threats. Rodents probably eat seeds and seedlings; possums probably eat flowers and seedlings. The speargrass weevil (Hadramphus spinipennis) is dependent on the speargrass, but can be locally very damaging: adults eat stems, flowers and leaves; larvae eat roots as well. Thick exotic grass swards may inhibit seedling establishment.

*Attribution:

Fact Sheet prepared for NZPCN by P.J. de Lange 1 August 2003. Description based on Allan (1961) supplemented with observations obtained from fresh plants and herbarium specimens - see also de Lange et al. (2010)

References and further reading:

Allan, H.H. 1961. Flora of New Zealand. Vol. I. Government Printer, Wellington (as *Coxella dieffenbachii* Cheeseman & Hemsl.)

de Lange, P.J.; Heenan, P.B.; Norton, D.A.; Rolfe, J.R.; Sawyer, J.W.D. 2010: Threatened Plants of New Zealand. Canterbury University Press, Christchurch.

Dawson, J.W. 1969: New Zealand Umbelliferae. A Leaf Comparison of *Aciphylla* and *Anisotome. New Zealand Journal of Botany 6*: 450-458.

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=98



Caption: Chatham Islands **Photographer:** Peter de Lange



Caption: Immature fruit on

cultivated plant

Photographer: John Barkla