

A GUIDE TO THE CYPERACEAE FAMILY

The following key and glossary may be of use to those who are interested in the family Cyperaceae, which is widespread throughout New Zealand.

The order Glumiflorae is divided into two families: Gramineae, grasses, and Cyperaceae, sedges. To assist in understanding the differences between these two families the description from Cheeseman's "Manual of the New Zealand Flora" reads as follows:-

Gramineae:- Stem cylindrical, hollow except at the nodes; leaf-sheaths split to the base. Flowers hermaphrodite or rarely unisexual. Perianth wanting or represented by 2 minute scales. Anthers versatile.

Cyperaceae:- Stem usually solid and trigonous, leaf-sheath entire. Flowers hermaphrodite or unisexual. Perianth wanting or represented by minute hypogynous scabs or bristles. Anthers basifixed. Ovary 1-celled. Fruit compressed or trigonous.

The following key to Cyperaceae could be a guide until the new Allan's Flora Vol. 2 is available.

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|----|-------------------------------------------------------------------------------------------------|------------------|----|
| 1. | Utricle present; flowers unisexual. | CARICEAE | 2 |
| | Utricle absent; flowers hermaphrodite. | | 3 |
| 2. | Rhachilla hooked. | <u>UNCINIA</u> | |
| | Rhachilla not hooked. | <u>CAREX</u> | |
| 3. | Spikelets very few-flowered, mostly 2-fl'd; often 2 or more of lowest glumes empty. | RHYNCOSPOREAE | 4 |
| | Spikelets several to many-fl'd; only 1 or rarely 2 of the lowest glumes empty. | | 11 |
| 4. | Hypogynous scales of 6 perianth-like segments. | <u>OREOBOLUS</u> | |
| | Hypogynous scales modified into setae, or thin, or absent. | | 5 |
| 5. | Hypogynous setae absent. | | 6 |
| | Hypogynous setae present. | | 8 |
| 6. | Style not swollen at base. | <u>GAHNIA</u> | |
| | Style not as above. | | 7 |
| 7. | Style long, linear; base often dilated but continuous with the nut; style branches 3, rarely 2. | <u>CLADIUM</u> | |
| | Style slender, sometimes slightly thickened near the base; style branches 3. | <u>SCHOENUS</u> | |

8.	Hypogynous setae plumose. Hypogynous setae not plumose	<u>CARPHA</u>	9
9.	Glumes not distichous. Glumes distichous.	<u>CLADIUM</u>	10
10.	Rhachilla elongated and flexuose between flowering glumes, with flowers seated in alternate notches. Rhachilla not as above, seta accrescent.	<u>SCHOENUS</u> <u>LEPIDOSPERMA</u>	
11.	Glumes distichous. Glumes not distichous.	CYPEREAE SCIRPEAE	12 14
12.	Rhachilla persistent. Rhachilla deciduous.	+ <u>CYPERUS</u>	13
13.	Style 3-branched. Style 2-branched.	<u>MARISCUS</u> + <u>KYLLINGA</u>	
14.	Hypogynous scales and setae absent. Hypogynous scales <u>or</u> setae present.	<u>FIMERISTYLIS</u>	15
15.	Stem leafless, lower bract glume-like. Stems leafy at base, lower bract not glume-like.	<u>ELEOCHARIS</u> <u>SCIRPUS</u>	

+ Not natives of New Zealand.

GLOSSARY

ACCRESCENT	Enlarging in size with age, as with the calyx of some plants after flowering period.
BASIFIXED	Attached by the base or lower end.
BRACT	A modified leaf subtending a flower or cluster of flowers. Modified leaves in the space between the calyx and true leaves.
BRISTLE	Stiff hair.
DISTICHOUS	Arranged in two vertical rows or ranks, as in the florets of many grasses and sedges.
FLEXUOSE	Bent or curved alternately in opposite directions. i.e. zig-zag.
GLUME	The term applied to the chaff-like and usually distichous bracts of the inflorescences of grasses and sedges.

HYPOGYNOUS	Below the ovary; joining between the ovary and pedicel.
PERIANTH	The floral envelope, either the calyx or corolla or both.
PERICARP	Seed vessel or ripened ovary.
PERIGYNIUM	The flask-shaped utricle of a Carex or Uncinia, including the true fruit.
PLUMOSE	Plume-like; having fine hairs on each side like those of a feather.
RHACHILLA	The axis of the spikelet in Glumiflorae.
SETA	(Plural - SETAE) A bristle of any kind; a stiff hair.
SPIKELET	In grasses and sedges, applied to a cluster or small spike of one or more flowers, usually subtended by a pair of glumes.
STYLE	The upper attenuated part of a pistil or carpel, bearing the stigma at its top.
TRIGONOUS	Three-angled with flat faces.
UTRICLE	Membranous sac enclosing the fruit proper in Carex and Uncinia.

DERIVATIONS OF SOME OF THE NAMES

<u>CAREX</u>	Greek. - I shear or cut - allusion to the sharp leaves.
<u>CLADIUM</u>	Greek. - A branch or twig.
<u>CYPERUS</u>	Greek. - A reed.
<u>RHYNCHOSPORA</u>	Greek. - A beak and a seed. - The permanent base of the style forming a beak to the seed.
<u>SCIRPUS</u>	Celtic. - From a Celtic word signifying a cord.

C.L.Purdie.

CORRECTION.

Moanatuata Bog, Hamilton. - Newsletter of March, 1970.

Dr. L.B.Moore, in a recent letter to me, has kindly drawn my attention to a continuous mis-spelling of the word Sporodanthus. It should be Sporadanthus.

She also questioned the wisdom of referring to Hypolaem lateriflora as the unfamiliar Calorophus.

My thanks go to Dr. Moore for drawing these points to my attention.

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