

# PHRYMACEAE

## CYRTANDROMOEAE

herbs (annual/perennial)/subshrubs, glabrous to pubescent; stems prostrate to ascending or erect, quadrangular to winged; lvs cauline or in a basal rosette flw distinctly pedicellate; K tubular, 5-dentate, lobes much shorter than the K tube, usu. winged on midveins of lobes C white with purple/bluish marks, blue or yellow to orange or red, strongly 2-lipped, tube cylindrical A4, included; fr capsule loculicidal, K accrescent; western N Am. to Mexico (*M. orbicularis* a floating aquatic), AUS, Africa, Asia

herbs (annual/perennial), semi-aquatic, not rhizomatous; stems prostrate (or erect), rooting at nodes, forming mats lvs semi-succulent, glandular-punctate flw single, axillary in sporadic nodes, subsessile to pedicellate; K 3–5 mm; C blue-purple, with white-yellow palate A4; ovaries 2-locular; stigma bilamellate; fr capsule loculicidal; seed ribbed; AUS, New Zealand

## MIMULEAE

herbs (annual/perennial), small, glabrous

stems prostrate, rooting at the nodes flw sessile; K tubular-campanulate, 5-ribbed, 5-lobed, divided nearly to a third of length, lobes dentate-ovoid, acute, ciliate on margin C pink, tubular, 2-lipped, with very short tube A2, included; stigma inflexed, ligular; seed testa obscurely reticulate; trop. Asia to AUS

stems prostrate, rooting at the nodes; lvs usu. ovoid or orbicular flw (sub)sessile; K regularly 5-partite, divided nearly to middle; C whitish, 2-lipped to subrotate, with very short tube, lobes subequal A2, exerted; seeds numerous to few, testa rugose, with 4 longitudinal ridges mostly AUS (*P. maritimum* extending to India and N Africa)

herbs (annual), terrestrial, not rhizomatous; stems erect (5–30 cm); lvs herbaceous to semi-succulent flw single, axillary in distal nodes, pedicellate; fruiting pedicels 15–40 mm K semi-succulent, 5–7 mm; C yellow or blue with a yellow throat, occ. red-dotted; A4; anthers 2-celled; ovaries 2-locular; stigma bilamellate fr capsule loculicidal, thin-walled; seed surface tessellate; AUS, Papua New Guinea, Timor

stems short, reduced, slender creeping stolons from leaf axils; lvs cauline or rosulate, linear or spatulate, obtuse, margin entire flw distinctly pedicellate; K campanulate, 3–4-lobed, lobes much shorter than K tube C whitish-bluish, tubular, weakly 2-lipped, very short tube; A4 or 2(+2 filiform staminodes); seed testa smooth mainly AUS, New Zealand (*G. diandrum* extending to India, Indochina, and southern Africa)

stems erect; flw sessile to very shortly pedicellate K inflated, 5-ribbed, 5-lobed, divided nearly to a third of length, lobes narrowly ovoid C tube slender, filiform, widened, but almost unlobed at the top A2, exerted; seed testa obscurely reticulate; C AUS/Queensland

herbs (perennial) with short, vertical rhizome; stem basally terete, usu. swollen above lower nodes; lvs petiolate infl racemose, terminal, axillary; flw with 2 bractlets, sharply reflexed after anthesis; K synsepalous, zygo, accrescent, K shed with fruit enclosed C white and lavender, 2-lipped, posterior lip upturned, anterior lip much longer, ± horizontal, 3-lobed; A4 didynamous, inserted on C, included G2, pseudomonomerous; fr achene, pericarp smooth, glabrous; seed coat vestigial; N Am./E Asia (mesic forests)

## PHRYMEAE

herbs (perennial suffrutescent)/shrubs, glabrous to viscid-villose lvs in some shortly petiolate, margin dentate; flw large/showy, shortly pedicellate K (tubular-)campanulate, 5-costate, 5-lobed; C subrotate, 2-lipped, tube exceeding K, lobes rounded A exerted; seeds linear-oblong, testa reticulate(-striate); C Am.

## DIPLACEAE

herbs (annual/perennial), terrestrial; stems terete flw single, axillary, often appearing sessile from basal rosette (foreshortened nodes) C yellow, white, white with purple patterning, pink, purple to light violet, red, orange, marcescent fr capsule, many-seeded, K persistent; seed surface reticulate to nearly smooth; W N Am.

herb (annual), densely pilose (with spreading hairs) and glandular-pubescent; stems terete to weakly quadrangular flw distinctly pedicellate; K 5-lobed, lobes much shorter than tube, 5-sulcate, but not angled or winged C yellow or purplish, weakly 2-lipped, palate absent; A included (anthers of abaxial pair much smaller, reduced or lacking); ovary glandular-pubescent; fr capsule loculicidal; W N Am.

## LEUCOCARPEAE

herbs (perennial), glabrous to somewhat glandular-pubescent; stems narrowly 4-winged lvs cordate-amplexicaulous at base, acuminate, with serrate margin flw shortly pedicellate; K membranaceous, tubular-campanulate, conspicuously 5-costate, with 5 setaceous teeth C yellow, zygo, lips spreading, tube elongate; A included; fr berry; seeds subglobose, testa reticulate; trop. Am.

herbs (annual/perennials rhizomatous), terrestrial or semi-aquatic; stems terete or 4-angled; lvs often glandular-punctate flw solitary/axillary in multiples; fruiting pedicels usu. longer than K; C deciduous, limbs bilabiate or nearly regular fr capsule loculicidal, many-seeded, K persistent, included; seed surface reticulate/nearly smooth N Am., Himalayas, E Asia

**CYRTANDROMOEA** 11

**MIMULUS** 7

**THYRIDIA** 1

**MICROCARPAEA** 2

**PEPLIDIUM** 4

**UVEDALIA** 2

**GLOSSOSTIGMA** 5

**ELACHOLOMA** 2

**PHRYMA** 1

**HEMICHAEANA** 6

**DIPLACUS** 54

**MIMETANTHE** 1

**LEUCOCARPUS** 1

**ERYTHRANTHE** 121

## PHRYMACEAE

herbs  
stems usu. ± quadrangular  
lvs mostly cauline, sessile,  
lamina margin toothed (entire)  
stigma 2-lamellate, sensitive  
ovules many per carpel  
seeds numerous

14 genera, ~220 spp.

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