

PERIANTH TYPE

Perianth type can include aspects of the entire perianth; however, it could include aspects of only the calyx, corolla, or hypanthium (if present). Generally, perianth type is based on the structure of the corolla alone, in which case it could logically be termed corolla type. The terminology for perianth type takes into account various aspects of shape, fusion, and merosity. Perianth type is often of systematic value and may be diagnostic for certain clades of angiosperms.

The perianth type typically reflects adaptive features related to pollination biology, such as attracting a pollinator or better effecting the transfer of pollen. Some perianths are highly modified for other functions, such as the **lodicules** of grasses, which are reduced perianth parts that, upon swelling, open up the grass floret.

Specific perianth types include the following: **bilabiate**, two-lipped, with two, generally upper and lower segments, as in many Lamiaceae; **calyptrate/operculate**, having calyx and corolla fused into a cap that falls off as a unit, as in *Eucalyptus*; **campanulate**, bell-shaped, with a basally rounded flaring tube about as broad as long and flaring lobes, as in *Campanula* (may also be used for bell-shaped apopetalous corolla or apotepalous perianth); **carinate**, keeled, with a sharp median fold, usually on the abaxial side; **coronate**, with a tubular or flaring perianth or staminal outgrowth, as in *Narcissus*, *Asclepias* spp.; **cruciate**, with four distinct petals in cross form, as in many Brassicaceae; **cucullate/galeate**, hooded, with an concave posterior lip; **disk**, having an actinomorphic, tubular corolla with flaring lobes, as in some Asteraceae; **infundibular**, funnel-shaped, with a tubular base and continuously expanded apex, as in *Ipomoea*, morning glory; **lingulate/ray**, strap- or tongue-shaped, as in certain Asteraceae; **papilionaceous**, with one large posterior petal (banner or standard), two lateral petals (wings), and two usually apically connate lower petals (keel), the floral structure of the Faboideae (Fabaceae); **personate**, two lipped, with the upper arched and the lower protruding into the corolla throat, as

in *Antirrhinum*, snapdragon; **ray**, having a short, tubular corolla with a single, elongate, strap-like apical extension, as in some Asteraceae; **rotate**, with a short tube and wide limbs oriented at right angles to the tube, as in *Phlox*; **saccate**, having a pouch like evagination; **salverform**, trumpet-shaped; with a long, slender tube and flaring limbs at right angles to tube; **tubular**, mostly cylindrical; **unguiculate**, clawed, as in many Brassicaceae, Caryophyllaceae; and **urceolate**, urn-shaped, expanded at base and constricted at apex, as in many Ericaceae.

