

11. Tribe CALENDULEAE

金盞花族 jin zhan hua zu

Chen Yilin (陈艺林 Chen Yi-ling); Bertil Nordenstam

Herbs, shrubs, or subshrubs, annual or perennial. Leaves often alternate. Capitula radiate, heterogamous. Involucre campanulate, hemispheric, or rarely conic; phyllaries 1–3 (or 4)-seriate, often with scarious margins. Receptacle flat or convex, naked. Ray florets female, fertile or sterile, tube short; lamina yellow, orange, or white, sometimes pink to purple or blue, apically 3-denticulate. Style linear, glabrous, style branches obtuse, rarely acute. Disk florets bisexual or male, actinomorphic, funnel-shaped, 5-lobed. Anthers caudate at base. Style simple or minutely bifid, rare bifurcate, dorsally papillate or rarely hirsute. Corolla yellow or orange, rarely white. Achenes usually hard, thickened, sometimes with fleshy exocarp, terete, orbicular, obovate, or heteromorphic, curved or beaked. Pappus absent.

Twelve genera and ca. 120 species: mainly in S Africa, through tropical Africa to the Mediterranean, eastward to Iran; one species (introduced) in China.

186. CALENDULA Linnaeus, Sp. Pl. 2: 921. 1753.

金盞花属 jin zhan hua shu

Herbs, annual or perennial, sometimes suffrutescent, glandular pubescent. Leaves alternate, sessile, margin entire or repand-dentate. Capitula solitary, terminal. Involucre campanulate or hemispheric; phyllaries 1- or 2-seriate, lanceolate to linear-lanceolate, acuminate, with scarious margins. Receptacle flat or convex, glabrous, heterogamous. Ray florets female, 2- or 3-seriate, fertile; lamina apically 3-denticulate; style terete, 2-lobed. Disk florets bisexual, functionally male; corolla tubular–funnel-shaped. Style undivided, apically thickened or globose. Achenes polymorphic; outer cymbiform, somewhat curved, rostrate, or triquetrous; inner distinctly curved, sometimes winged, all dorsally rugose to tuberculate-aculeate. $x = 7, 8, 9, 11, 15$.

About 15 or 20 species: mainly in SW Asia, W Europe, Macaronesia, and Mediterranean region; one species (introduced) in China.

1. *Calendula officinalis* Linnaeus, Sp. Pl. 2: 921. 1753.

金盞菊 jin zhan ju

Herbs, annual, 20–75 cm tall, usually branched from base, green, \pm glandular pubescent. Basal leaves oblong-obovate or spatulate, 15–20 cm, margin entire or remotely denticulate; stem leaves oblong, oblong-lanceolate, or oblong-obovate, 5–15 \times 1–3 cm, \pm amplexicaul, margin inconspicuously repand-denticulate, apex obtuse, rarely acute. Capitula 4–5 cm in diam.; phyl-

laries lanceolate or oblong-lanceolate, outer slightly longer than inner, acuminate. Ray florets yellow or orange, ca. 2 \times as long as involucre, lamina up to 4–5 mm wide. Disk florets with triangular-lanceolate lobes. Achenes curved, yellowish or brownish, outer half-curved, often aculeate rostrate at apex, lateral-winged ridge irregularly rugose. Fl. Apr–Sep, fr. Jun–Oct.

Cultivated as an ornamental in parks and gardens of China [native origin unknown].