

LYTHRACEAE

by

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Herbs, shrubs or trees. Leaves simple, opposite or verticillate. Stipules small and deciduous or wanting. Flowers hermaphrodite, usually actinomorphic or rarely zygomorphic, sometimes cleistogamic, usually solitary or cymose, rarely paniculate. Receptacle campanulate or tubular. Sepals mostly 4—6, valvate, alternating with smaller lobes or teeth. Petals free, as many as the sepals or sometimes wanting. Stamens very variable in number, inserted at various heights in the receptacle in one or more series, equal or some smaller or imperfect, somewhat lower inserted in the receptacle than the petals; filaments filiform; anthers 2-celled, basifixed or dorsifixed, introrse. Ovary superior, sometimes stipitate, mostly 2—6-locular with axile placentation; style usually long and slender, sometimes short and thick; stigma rather small, capitate or slightly 2-lobed. Ovules numerous to 2 per locule. Fruit capsular and dehiscent, more or less enclosed by the calyx. Seeds mostly numerous, sometimes winged. Embryo straight. Endosperm wanting.

About 500 species in 22 genera, mainly in the tropics, especially of the New World, and subtropics; less numerous in the temperate regions.

Ammannia Linnaeus, Gen. ed. 1: 337. 1737; Spec. Plant. 119. 1753

Glabrous, annual herbs, with stems more or less 4-angled in the upper portion. Leaves opposite or rarely subalternate, sessile, entire. Inflorescence consisting of axillary, 2-forked cymes or reduced clusters. Flowers small, 4-merous in the local species. Receptacle campanulate or urn-shaped. Sepals 4, with 4 accessory teeth. Petals 4 or wanting, inserted in the throat of the receptacle, generally caducous. Stamens 4 or 8, inserted on the inside of the receptacle. Ovary sessile, incompletely 1—5-locular; style very short or exerted; stigma capitate. Ovules numerous on placentas projecting from the axis or attached to the partitions. Fruit a thinly membranaceous capsule enclosed by the thin receptacle or somewhat protruding from it, bursting irregularly. Seeds numerous, very small, leathery.

About 20 species, growing in marshes and wet places in tropical and subtropical regions, especially in Africa.

Key to the species:

1. Leaves 1—4 cm long and 1—4 mm wide; flowers axillary on very slender pedicels, red to red-purplish *A. auriculata*
Leaves more than 4 cm long and 4 mm wide 2
2. Flowers green; petals wanting; style long *A. latifolia*
Flowers red; style short *A. coccinea*

***Ammania latifolia* L.**

LINNAEUS, Spec. Plant. 119. 1753; GRISEBACH, Fl. Br. W. Ind. Isl. 270. 1860; DUSS, Fl. phan. Ant. franç. 290. 1897; KOEHNE in ENGLER, Pflanzenreich IV, 216: 50. 1903; URBAN, Symb. Ant. 4: 435. 1910; BOLDINGH, Fl. Ned. W. Ind. Eil. 302. 1913; Fl. D.W. Ind. Isl. 2: 81. 1914; URBAN, Symb. Ant. 8: 470. 1920; BRITTON & MILLSFAUGH, Bahama Fl. 299. 1920; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 6: 19. 1925; FAWCETT & RENDLE, Fl. Jamaica 5(3): 294, fig. 114. 1926; WILLIAMS, Fl. Trinidad & Tobago 1: 412. 1940; LEON & ALAIN, Fl. Cuba 3: 391. 1953; ARNOLDO, Zakflora 113. 1954; Zakflora 153. 1964; GOODING *et al.*, Fl. Barbados 69. 1965; ADAMS, Flowering Plants of Jamaica 506. 1972.

Glabrous herb; stems up to 60(—90) cm long, erect or ascending from a decumbent, rooting base, simple or much branched, rounded in the lower part and 4-angled above. Leaves decussate, sessile; the blade elliptic-lanceolate, linear-lanceolate or linear, obtuse at the apex and auriculate at the base, entire, 2—8 cm long and 0.5—2(—2.5) cm wide, but usually smaller. Flowers subsessile (1—)3(—5) in each leafaxil. Bracts linear, 3 mm long. Receptacle oblong, urnshaped, 4—5 mm long and 3 mm wide in flower, ribbed, globose in fruit. Sepals 4, short, tooth-like, spreading and indistinct, accessory teeth 4, spreading. Petals wanting. Stamens 4—8, inserted in the lower half of the receptacle; filaments c. 2 mm long; anthers very small. Pistil enclosed in the receptacle; ovary sessile, 4-locular; style very short; stigma capitate. Capsules globose, 4 mm long, in pseudo-whorls of 6 after shedding of the leaves. Seeds very small, less than 0.5 mm long, light brown, reticulate.

South-eastern United States to Paraquay; West Indies.

Rather common in pools.

BOINAIRE: Playa Grandi (Boldingh 7296, fr. Feb.); slope of Macutacao (Boldingh 7122, st. Jan.); Dos Pos (Arnoldo 426, fr. Feb.); Put Bronswinkel (Stoffers 681, fl. Nov.; 6201, st. Feb.); Karpata (Stoffers 6233A, fl. & fr. Feb.).

CURAÇAO: Hofje of Barber (Boldingh 5226, fr. Nov.); tanki along road from Knip Plantation to Lagoen (Stoffers 8193, fl. & fr. Dec.).

ST. MARTIN: along roads in Cul de Sac (Stoffers 2434, fr. March).

***Ammannia coccinea* Rottb.**

ROTTBOELL, *Plant. Hort. Univ. Havn. Progr.* 7: 1773; KOEHNE in ENGLER, *Pflanzenreich* IV, 216: 49. 1903; URBAN, *Symb. Ant.* 4: 435. 1910; BOLDINGH, *Fl. Ned. W. Ind. Eil.* 302. 1913; *Fl. D.W. Ind. Isl.* 2: 81. 1914; URBAN, *Symb. Ant.* 8: 470. 1920; BRITTON & WILSON, *Sci. Surv. Porto Rico & Virgin Isl.* 6: 19. 1925; FAWCETT & RENDLE, *Fl. Jamaica* 5(3): 295. 1926; LEON & ALAIN, *Fl. Cuba* 3: 391. 1953; ARNOLDO, *Zakflora* 114. 1954; *Zakflora* 153. 1964; GOODING *et al.*, *Fl. Barbados* 69. 1965; ADAMS, *Flowering plants of Jamaica* 506. 1972.

Herb, up to 60 cm tall; stems simple or more usually branched above, more or less rounded in the lower parts and 4-angled above. Leaves decussate; the blade linear-lanceolate to linear, acute at the apex, auriculate at the base, entire, 2.5—7 cm long and 5—10 mm wide, glabrous but scabridulous-margined. Flowers 1—3 in dichasia in the leaf-axils; the terminal pedicel 0—3 mm long, the lateral 1—1.5 mm long, slender. Bracteoles linear, 1.5 mm long. Receptacle urn-shaped, 8-veined, 2.5—4 mm long. Sepals 4, nearly 1 mm long, accessory teeth 4. Petals 4, broadly obovate, about 2 × 2 mm, bright rose or pink to deep magenta, deciduous. Stamens 4(—10); filaments inserted in or just below the middle of the receptacle, exerted; anthers very small. Ovary sessile, 4-locular; style 2—2.5 mm long; stigma capitate. Capsule globose, c. 4 mm in diam., enclosed in the receptacle. Seeds numerous, very small, less than 0.5 mm, dark brown, reticulate.

E. and S. United States, from Mexico to Brazil, West Indies, Pacific Islands, and Philippines.

Moist places and in pools.

BONAIRE: Sabana (Stoffers 739, fl. Nov.); behind dam near Jatoe Bacoe (Stoffers 640, fl. Nov.); Karpata (Stoffers 6233, fl. & fr. Feb.).

CURAÇAO: Museum garden, Mundo Nobo (Arnoldo 1981, fl. & fr. Feb.); Santa Cruz (Britton & Shafer 3010, fl. & fr. March).

***Ammannia auriculata* Willd.**

WILDENOW, *Hort. Berol.* 1: t. 7. 1806; KOEHNE in ENGLER, *Pflanzenreich* IV, 216: 45. 1903; BOLDINGH, *Fl. Ned. W. Ind. Eil.* 302. 1913; *Fl. D.W. Ind. Isl.* 2: 81. 1914; LEON & ALAIN, *Fl. Cuba* 3: 391, fig. 179b. 1953; ARNOLDO, *Zakflora* 91. 1954; *Zakflora* 153. 1964.

Branched herb, up to 50 cm high; stems rounded in the lower portion and angular or very slightly winged above. Leaves decussate, sessile; blade linear or sublanceolate, acutish at the apex, auriculate at the base, 1—4 cm long and 1—4 mm wide, glabrous. Inflorescence cymose, (1—)3—7-flowered; peduncle and pedicels slender, 3—12 mm long. Bracts and bracteoles narrow-lanceolate, 1—2 mm long. Receptacle tubular, 2 mm long, in fruit subglobose, nerves thin. Sepals 0.5—1 mm long, accessory lobes minute, at length disappearing. Petals obovate, 2 mm long and 1.5 mm wide, red to reddish-purple. Stamens 4—8, inserted in the lower half of the receptacle, exerted; filaments filiform; anthers

very small, c. 0.25 mm long. Ovary sessile, 4-locular; style 1.5 mm or more long; stigma capitate. Capsule 2—3 mm in diam., exceeding the receptacle. Seeds small, brown, reticulate.

Tropical and subtropical regions.

In pools and on moist soil.

BONAIRE: Sabana (Arnoldo s.n., fl. & fr. Feb.; Stoffers 738, fl. & fr. Nov.); calcareous hills near Rincón (Boldingh 7153, fl. & fr. Feb.); calcareous plateau of Klein Bonaire (Boldingh 7486, fr. Feb.); neighbourhood of Rincón (Boldingh 7233, fl. & fr. Jan.).