Plant Resources of South-East Asia

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Medicinal and poisonous plants 3

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Amischotolype Hassk.


COMMELINACEAE

Amischotolype comprises approximately 15 species, and occurs in tropical Africa (1 species) and tropical Asia, from India to southern China and New Guinea.

Uses Some records exist of medicinal applications of Amischotolype roots in Peninsular Malaysia: an infusion or decoction is drunk to treat rheumatism and fever, and both are applied as a poultice against headache. Young shoots are sometimes cooked and eaten as a vegetable, e.g. those of A. mollissima (Blume) Hassk. in Indonesia.

Properties The steroid ecdysterone (commisterone) has been isolated from whole A. mollissima plants.

Botany Robust perennial herbs, often with stems creeping at base and erect higher up. Leaves arranged spirally, simple and entire, lanceolate, petiolate and with cylindrical, usually hairy leaf-sheaths at base. Inflorescence an axillary, dense, often head-like cyme. Flowers bisexual, regular, 3-merous, subsessile to shortly pedicellate; sepals free, subequal, keeled to boat-shaped, accrescent after anthesis; petals free, subequal, about as long as sepals; stamens 6, all fertile, subequal, filaments often bearded; ovary superior, sessile, 3-celled. Fruit a 3-celled capsule, opening loculicidally with 3 valves, each cell 1-2-seeded. Seeds ellipsoid, embedded in a red aril, with linear hilum.

The Amischotolype species treated here are often better known under the name Forrestia. However, this name is incorrect because it was published earlier as a genus name in Rhamnaceae (a synonym of Ceanothus).

Ecology Amischotolype occurs in the understorey of lowland and lower montane forest.

Genetic resources The Amischotolype species treated here are all recorded as endemic to Peninsular Malaysia, although A. griffithii has recently been collected in Borneo. They seem easily liable to genetic erosion, but their status is still unclear as long as Amischotolype remains so poorly studied taxonomically and, as a consequence, the exact areas of distribution of the species are unclear.

Prospects Very little information is available on all aspects of Amischotolype. More research on phytochemistry and pharmacological properties
as well as on botany is still needed before the prospects as medicinal plants can be judged.

**Literature** 331, 853.

**Selection of species**

**Amischotolyte gracilis** (Ridley) I.M. Turner


**Synonyms** *Forrestia gracilis* Ridley (1903).

**Vernacular names** Malaysia: setawar betina, tebu kera, bush anku (Peninsular).

**Distribution** Peninsular Malaysia.

**Uses** An infusion or decoction of the roots is drunk to treat rheumatism.

**Observations** A herb up to 100 cm tall, with slender, c. 0.5 cm thick stems shortly creeping at base; leaves c. 20 cm x 5 cm, glabrous above, velvety beneath, red-hairy at edges; inflorescence small, few-flowered. *A. gracilis* is common in lowland forest.

**Selected sources** 121, 789.

**Amischotolyte griffithii** (C.B. Clarke) I.M. Turner


**Synonyms** *Forrestia griffithii* C.B. Clarke (1881).

**Vernacular names** Malaysia: setawar hutang, setawar jantan, pokok sampu landak (Peninsular).

**Distribution** Peninsular Malaysia and Borneo (Brunei).

**Uses** In Peninsular Malaysia, a decoction of the roots is drunk against fever.

**Observations** A herb up to 100 cm tall, with c. 2.5 cm thick stems creeping at base; leaves c. 22.5 cm x 7.5 cm, hairy all over; inflorescence small, c. 1.5 cm in diameter, compact, subglandular. *A. griffithii* occurs in lowland forest.

**Selected sources** 121, 789.

**Amischotolyte irritans** (Ridley) I.M. Turner


**Synonyms** *Forrestia irritans* Ridley (1903).

**Vernacular names** Malaysia: setawar gajah (Peninsular).

**Distribution** Peninsular Malaysia.

**Uses** A poultice of the roots is applied to treat headache.

**Observations** A tall herb with thick stems creeping at base; leaves c. 22.5 cm x 7.5 cm, hairy all over; inflorescence c. 3 cm in diameter, compact, covered with red spiny hairs. *A. irritans* is rather uncommon in hill forest.

**Selected sources** 121, 789.

Noorna Wati Haron

**Ammannia baccifera** L.

Sp. pl. 1: 120 (1753).

**Lythraceae**

*n* = 12

**Vernacular names** Blistering ammannia (En), Philippines: biangapu (Tagalog), apoy-apoyan (Pangasinan, Tagalog), parapit-angit (Pampangan). Thailand: kaoo rakna (Ratchaburi), naffak km (Bangkok), ya rakna (northern). Vietnam: mijaff ch (Os).

**Origin and geographic distribution** *A. baccifera* has a very large distribution comprising Africa, Afghanistan, Pakistan, India, Sri Lanka, Indo-China, China, Thailand, throughout Malasia (except Borneo, as far as is known) and Australia; recently introduced into the Caribbean (Guadeloupe, Jamaica).

**Uses** In the Philippines, *A. baccifera* is used in place of cantharides as a blistering plaster. In Pakistan and India, bruised fresh leaves are used for raising blisters against rheumatic pains and fever. *A. auriculata* Wild. is used for similar purposes. The leaves or the ash of *A. baccifera*, mixed with oil, are applied externally to cure herpetic eruptions and other skin diseases, and as remedy for ringworm and parasitic skin affections. An infusion made from entire plants is claimed to have aphrodisiac activity.

**Properties** *A. baccifera* is intensely acid. Food contaminated with the leaf extract may produce severe burning pain in the abdomen. Betulinic acid, daucosterol, ellagic acid, n-hentriacontane, lupeol, quecetin and triacontane-1,30-diol have been found in chemical studies. Tests with rats showed anti-uricosuric activity for an ethanolic extract of *A. baccifera*. A dose of 2 g/kg/day of the extract was effective in reducing the formation of urinary stones as well as in dissolving pre-formed ones. An aqueous ethanol extract showed hypotensive activity in dogs and mice. Extracts showed antibacterial activity against several plant pathogenic and human pathogenic bacteria; extracts obtained from stems, leaves and inflorescences were more effective than those from roots and seeds. A compound with strong piscicidal activity, α-