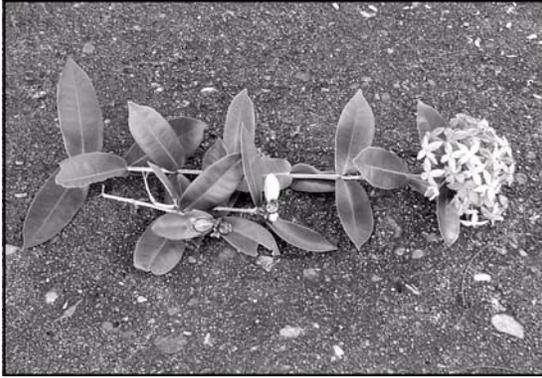


***Ixora coccinea* L.**
RUBIACEAE

jungle-geranium

Synonyms: *Ixora grandiflora* Bot.
Ixora bandhuca Roxbg.



General Description.—The common name of this plant, jungle-geranium, seems to be in slightly more common use than others: flame of the woods, flame of the forest, jungle flame, burning love, red ixora, ixora, amor ardiente, cruz de Malta, bola de coral, equisósea, and rajana (Griffiths 1994, Liogier 1997). Jungle-geranium is a densely branched shrub to 3 m in height and 3 or 4 cm in basal diameter. The stems and branches are gray. The plant produces a strong taproot with fine laterals. Mycorrhizal bifurcation is visible on the tips of fine roots. The dark green, oblong leaves are sessile or subsessile and hairless or nearly so (Liogier 1997). The inflorescences are terminal, dense corymbs that contain from 15 to 50 flowers (Whistler 2000). The flowers are tubular with four or five calyx lobes. The “wild” flower color is red or red-orange, but ornamental varieties may have white, yellow, salmon, or pink flowers. There are also dwarf varieties. The fruits are fleshy, globose berries that ripen to a dark red or purplish-black (Liogier 1997). When fully developed, there are two seeds per fruit. However, usually one develops and one aborts in Puerto Rican plants.

Range.—Jungle-geranium is native to India and Sri Lanka (Griffiths 1994). It is planted worldwide in tropical and subtropical climates and has naturalized in at least Puerto Rico (author’s observation, Liogier 1997).

Ecology.—Jungle-geranium grows well in full sun and light to moderate shade. It competes well with

shrubs and herbs but not with dense grass. Little is known about environmental conditions in its native range, but it grows naturally in Puerto Rico in areas that receive around 1800 mm of annual precipitation. Jungle-geranium grows well in all textured soils if moisture is adequate and drainage is good. The species prefers slightly acid soils with good fertility and becomes chlorotic under alkaline conditions. It tolerates mild salt spray (Watkins and Sheeham 1975). Jungle geranium is cold sensitive and will partially defoliate after chilling (Michaelia and others 1999). Frosts will kill it to the ground, but it recovers afterward (Tropilab 2001). Jungle-geranium in Florida is damaged by nematodes, root rot, leaf spots, and scale insects (Florida Gardener 2001).

Reproduction.—Jungle-geranium flowers throughout the year in full sunlight and light shade (Whistler 2000). Shrubs in heavy shade survive but rarely flower. A collection of fruits in Puerto Rico averaged 0.618 ± 0.015 g/fruit. Air-dry seeds from these fruits averaged 0.067 ± 0.001 g or 15,000 seeds/kg. Planted in commercial potting mix, 70 percent of these seeds germinated between 30 and 72 days following sowing. Jungle-geranium coppices when cut or burned and prostrate plants send up numerous vertical shoots. Frequent suckering occurs from lateral roots out to a distance of 30 cm or more from the parent plant. It also layers whenever a branch touches the ground. Jungle-geranium can be easily propagated from untreated cuttings with four leaves placed in a sand-peat mixture with bottom heat (Bailey 1941). Jungle-geranium is spreading slowly in Puerto Rico, presumably dispersed by birds.

Growth and Management.—Suckers and sprouts may grow as much as 1 m the first year, after which growth slows. Individual stems live at least 15 years; by coppicing and suckering, a plant may live almost indefinitely. Maintenance of jungle-geranium in hedges requires frequent pruning. The shrub is difficult to kill by mechanical means.

Benefits.—Jungle-geranium is one of the world’s most popular tropical flowering shrubs. It is used

for hedges and borders, for accent plants, in planters and as an indoor potted plant. The species may also be shaped into bonsais (Frommer 2001). In laboratory tests, extracts of jungle-geranium have shown antibacterial (Kumer and others 1997) and antitumor (Latha and Panikkar 2000, Serrame and Lim-Sylianco 1995) activity. From a methanol extract of the flowers, 13 chemicals were identified, including ursolic acid, which has known antitumor and antiviral activity (Monteath and others 2001). In the traditional medicine of India, infusions of the leaves and juice from the roots are used to treat a wide variety of ailments including dysentery, ulcers, and gonorrhea (Parrotta 2001). The flowers are visited by butterflies (Collins 2001), and birds eat the fruits.

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