

Throughout the Philippines, in thickets and secondary forests at low and medium altitudes; in Mt. Makiling, Luzon, in open wooded areas at low altitudes.

*Com. name* – *Binoyok-boyok* (Tag.).

*Exsicc.* – *Gates CA 1921* (CAHP).

## 105 BIXACEAE

Shrubs or small trees. Leaves simple, glabrous, hairy or scaly, alternate, entire or toothed, sometimes digitately lobed, palmately veined or rarely pinnate; stipules minute, caducous. Flowers usually large, in terminal panicles, perfect, regular; sepals 4 or 5, imbricate, deciduous, hypogynous, petals as many as sepals, free, entire, large, colored, imbricate and twisted in bud; stamens numerous, inserted on an annular, hypogynous disc, filaments thin, free; anthers straight or horse shoe-shaped, attached below, middle or at middle, versatile, 2-celled; ovaries superior, 1-celled or cells grown together with central placenta; ovules numerous, curved; styles simple, filiform. Capsules usually softly prickly, rarely smooth, loculicidally bivalved; endocarp membranous, separating from valves; seeds numerous, obovoid, angular, testa fleshy, studded with rounded, sessile glands.

Monotypic. Tropical America; cultivated in many tropical countries.

### 1. *BIXA* Linnaeus

Characteristics (Refer to family description)

1. *Bixa orellana* L., Sp. Pl. 512, 1753; Backer, Fl. Mal. I, 4: 239, f. 1, 2, 1951.

**Figure 135**

Shrubs erect or small trees. Leaves ovate, sometimes angularly toothed or lobulate, 10-20 cm long, midrib with 5-8 pairs of nerves, usually with 2 pairs from base, gradually acuminate, base truncately rounded or subcordate; petioles 3-5 cm long, slightly scurfy. Inflorescences terminal, erect, several branches scurfy; pedicels thick; flowers white or pink, 4-6 cm across, showy; sepals elliptic, pulverulent, united at base; petals obovately oblong, veiny, spreading; stamens interlaced; anthers opening by short, apical slits or pores; ovaries with slender style; stigmas notched. Capsules ovoidly globose, 4 cm long, covered with soft spines; seeds numerous, covered with dark red coloring matter.

In settled areas throughout the Philippines, often cultivated.

*Com. name* – *Achuete* (Bik., Ilk., P. Bis., Sbl., Tag.).

*Exsicc.* – *Ballesteros CA 8004\**; *Estioko, Jr. CA 1904, 1906*; *Gates CA 1905*; *Jesena CA 8878*; *Lugod CA 4723*; *Novero CA 8120* (CAHP).

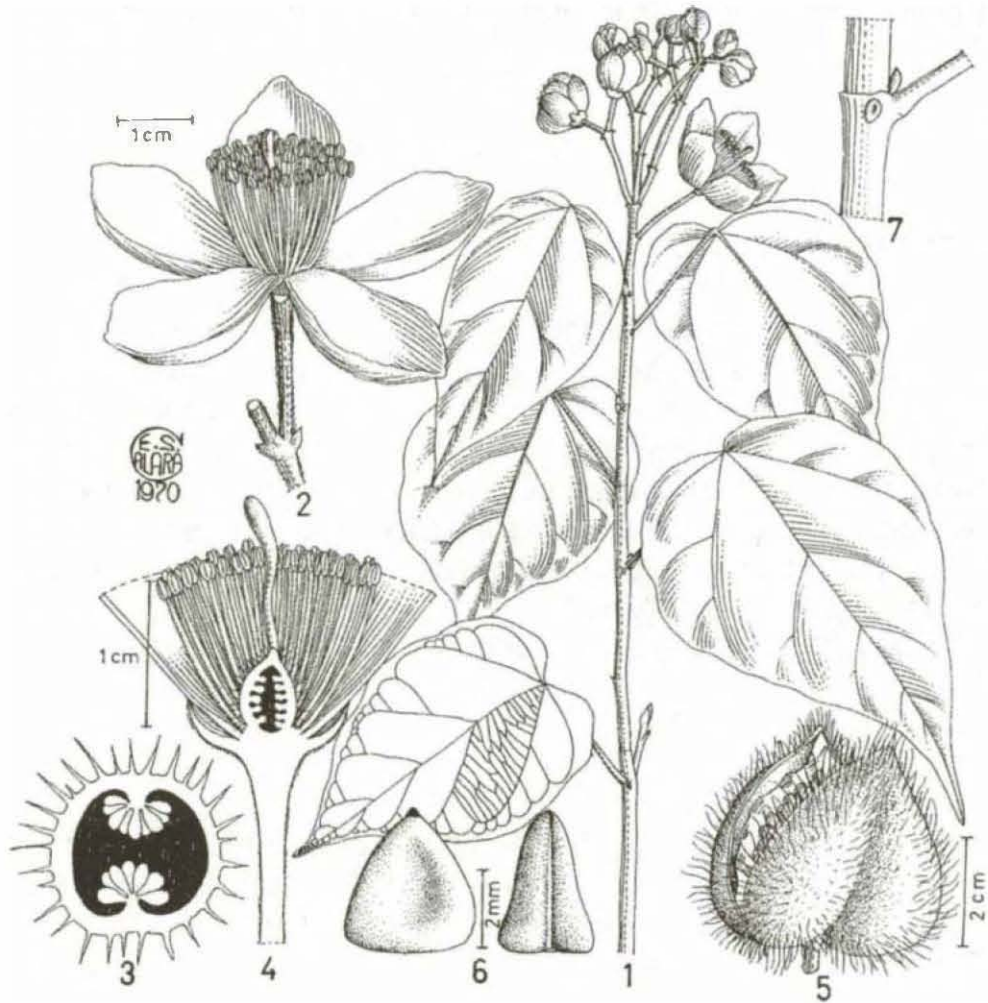


Figure 135. *Bixa orellana*: 1. flowering branch; 2. flower; 3. ovary, cross section; 4. flower, vertical section; 5. fruit; 6. seed, 2 views; 7. portion of stem showing stipules.