

## Studies on Philippine Liliaceae, Two Species from the Cordillera

Cecilie S. Longid\*

### ABSTRACT

*The present paper is part of a series of studies on the taxonomy of Philippine Liliaceae. Two species of Liliaceae found in the mountains of the Cordillera particularly on the slopes of Mountain Province and Ifugao; the *Lilium philippinense* Baker and the *Dianella ensifolia* Linn. are presented.*

Keywords: *Dianella*—*Liliaceae*—*Lilium*—Topotype

### MATERIALS AND METHODS

Observation and collection of the species were done in February, March, July, and August of 1991 and 1992. The plants were pressed in bamboo slats and oven-dried. Samples of the flowers and berries of *Dianella ensifolia* L. and the bulbs of *Lilium philippinense* Baker were preserved in formalin.

The specimens were compared with the specimens at the National Herbarium in Manila for verification of their identity, after which they were drawn scientifically on illustration boards. Topotypes were depos-

\* Institute of Biology

ited at the Herbarium at the University of the Philippines in Diliman, Quezon City.

A description of the genera and species are presented.

## DESCRIPTION OF THE GENERA

### *LILIUM* Tourn. ex L.

Perennial herbs with fleshy overlapping scaly bulbs. Stems erect or ascending, unbranched, smooth or pubescent, usually bright green, sometimes tinged with purple or brown, lanceolate to linear, rarely ovate-cordate, alternate, rarely whorled, sessile, sometimes with bulbils in the axils. Flowers 1 to more than 10, large, white, yellowish-orange, or reddish, often fragrant, erect, horizontal or pendulous, terminal, loosely corymbose-racemose or umbellate, or densely spicate, perfect; perianth deciduous, infundibulum or campanulate, segments 6, free, variable in shape and poise, but not spreading widely from the very base, nectar glands inside near the base. Stamens 6, prominent, hypogynous or slightly adherent to perianth segments, filaments filiform. Anthers linear or broadly lanceolate, versatile, opening lengthwise; ovary superior, sessile, 3-celled, ovules many in each cell, style elongate, stigma sometimes 3-lobed. Fruit a capsule, loculicidal, 3-valved. Seeds many, winged, flat.

Less than 90 species, mainly native of the temperate regions in the Northern Hemisphere; two to three varieties in Taiwan and two in the Philippines, one found in Batanes and the other in the Cordillera.

1. *Lilium philippinense* Baker in Gard. Chron. (1873) 1141. f. 243, Journ. Linn. Soc. Bot. 14 (1874) 228 (*philippinense*); Curtis' Bot. Mag. 111 32 (1876) t. 6250; *Naves Novis* app. (1880) 266; Vidal Rev. Pl. Vasc. Filip. (1886) 277; Merr. Philip. J. Sci. 5 (1910) Bot. 337. = *Lilium formosanum* Wallace var. *pricei* Wood. Lilies of the World. 1950; F.J. Chittendom et al., Dict. Gard. 1172 (1956); Bailey, Hortus Second 429. 1956. = *Lilium philippinense* Baker var. *formosanum* (Wallace) Wilson, Lilies East Asia 21. 1925; Yamamoto in Bot. Mag. Tokyo 40:92. 1926; Sasaki, List Pl. Form. 107. 1928 (Figure 1).

A perennial herb; bulbs globose or more or less broadly elliptical, 3–4.5 cm in diameter, almost not visibly yellow hue. Stems slender, green

often purplish-brown at base, 30–120 cm high, glabrous. Leaves scattered, alternate, very rarely opposite, linear-lanceolate to falcate-lanceolate, 8–15 cm long, 1–1.5 cm wide, midrib and lateral veins elevated beneath. Flowers terminal, usually solitary, rarely 2–3 in a raceme, horizontal, flushed wine-purple or purplish-striped without, 12–15 cm long, 5–7 cm wide; pedicel ascending, 5–15 cm long, glabrous, green tinged with purple; perianth segments oblanceolate, 12–25 cm long, 2–3 cm wide. Stamens 6, filaments papillose toward base, 8–9 cm long. Anthers cylindrical, yellow or yellowish-purple, 8–9 mm long. Ovary cylindrical, 3–3.5 cm long, style slender, cylindrical, 7–8 cm long, stigma 3-lobed, yellowish-white or whitish-green, pilose all over. Capsules cylindrical, 5–8 cm long. 2.5–3.2 cm in diameter, seeds many, brown, winged.

Specimen examined:

Sagada, Mountain Province

Longid, July 1992, Herbarium No. 10170 (IB)

Found on the grassy slopes of Benguet and Mountain Province as isolated plants.

Common names:

Benguet Lily, Easter Lily, Mountain Lily (Eng); *Os-osdong*, (Kankanai).

***DIANELLA* Lamarck**

Perennial evergreen herbaceous plants. Fibrous roots or stout branching rhizomes. Leaves grasslike or linear, 2-ranked, radical, subcoriaceous, flat, with costa elevated beneath, sheathing, bearing many short-terminal racemes, bracts small, pedicels jointed at the top. Perianth withering but not falling after anthesis. Flowers blue, occasionally pale-yellow, relatively small, nodding. Sepals free, narrowly oblong, 3–7 nerved. Stamens 6, filaments usually partially thickened, anthers opening by terminal pores or short slits. Ovary 3-celled, each cell with 4–8 ovules, styles filiform, stigma very small. Fruit globose or oblong-ovoid, blue berry, seeds black, shiny, ovoid or compressed.

1. *Dianella ensifolia* Linn. D.C. on Red. Lil. 1 (1802) t.l; *Naves Novis* App. (1880) 264; Vidal Rev. Pl. Vasc. Filip. (1886) 277. Phan. Cuming. Philip. (1885) 153; Merr. in Philip. J. Sci. 2 (1907) Bot. 266. 3 (1908) Bot. 401 5 (1910) Bot. 337; Hallier f. in Nova Guinea

8 (1914) 992. = *Dracaena ensifolia* Linn. Mant. 1 (1767) 63. = *Dianella robusta* Elm. Lefl. Philip. Bot. 5 (1913) 1806 (Figure 2).

A perennial herb; rhizomes creeping, conspicuous, usually well developed, glabrous. Nodes covered by sheaths of old decayed leaves. Leaves alternate, never in a rosette, numerous, coriaceous or nearly so, lanceolate or ensiform, gradually tapering toward apex, 40–50 cm long, 3–5 cm wide, entire, lustrous, glabrous, midrib raised below and keel-like. Scapes up to 10 cm long, ovate-lanceolate. Flowers bluish-purplish or white; pedicels 1–2 cm long, arcuate; bracteoles light red, membranous, small, 3–4 mm wide. Stamens 6, anthers yellow, 3–4 mm long, filaments short, about 4 mm long, more or less reniculate near the middle, swelling at apex. Ovary superior, globose, style thread-like about 6 mm long. Fruit a berry, nearly globose, 7–9 mm in diameter, purplish blue, seeds oblong, shiny, black.

Specimen examined:

Mount Pulis, Ifugao on Mountain slopes, solitary. Longid, 1990, Herbarium No. 10171 (IB ).

Plant is widely distributed in open shrub lands, along seashores to forests on mountain slopes.

Common names:

*Ablass* (Bag.); *bariu-bariu*, *oyon-oyon* (Bis.); *dangau* (Ig.).

## ACKNOWLEDGMENTS

The author wishes to acknowledge with gratitude the following: Dr. William Henry Scott, for supplying the topotype of the *Lilium*; Mr. Robert Cada, for the scientific illustrations; Mr. Robert Agcalao, for driving to the collection sites and The Rt. Rev. Robert Lee O. Longid for his support and encouragement.

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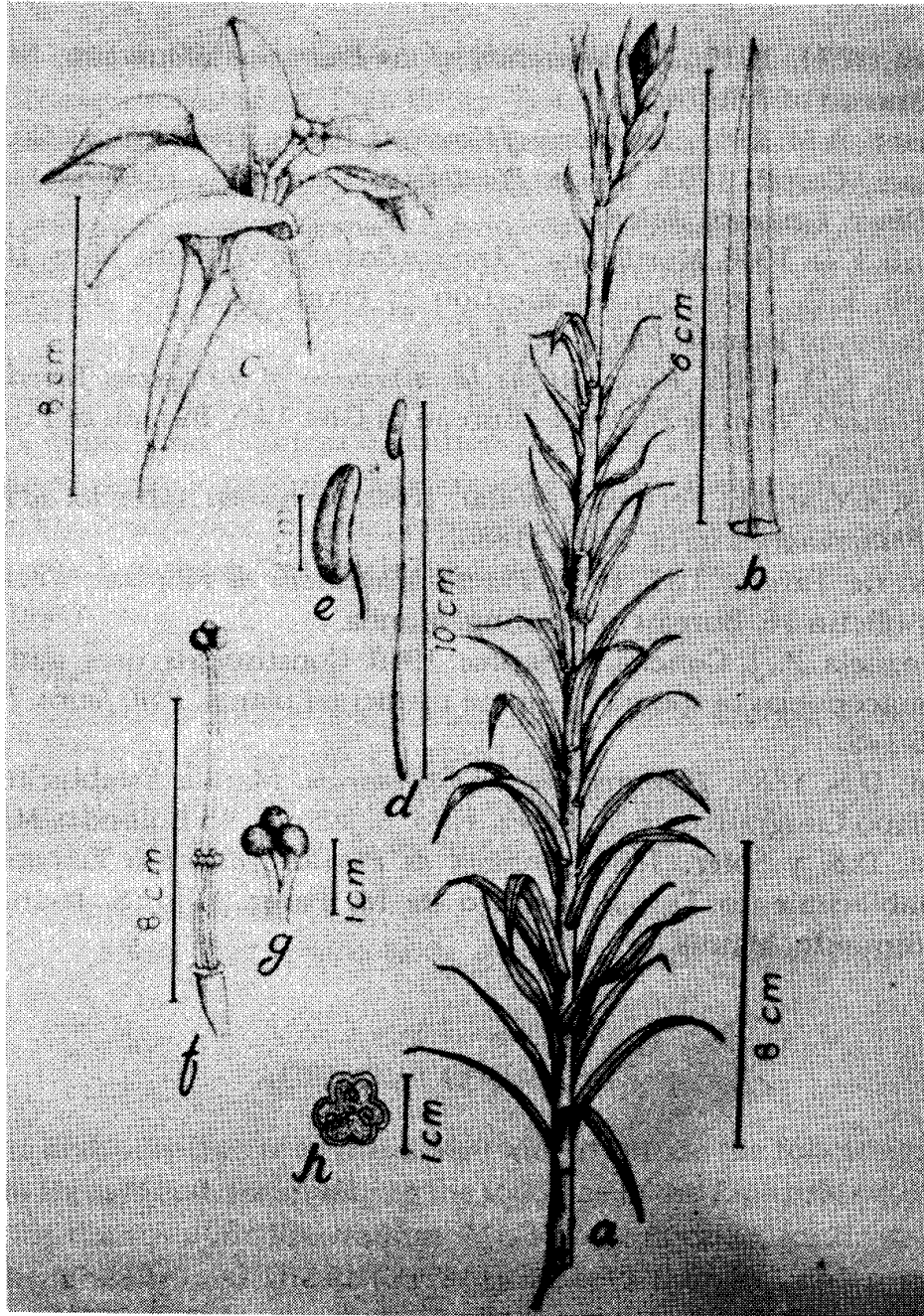


Figure 1. *Lilium philippinensis* Baker

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|-----------|-------------------|
| a) habit  | e) anther         |
| b) leaf   | f) pistil         |
| c) flower | g) stigma         |
| d) stamen | h) x-sec of ovary |

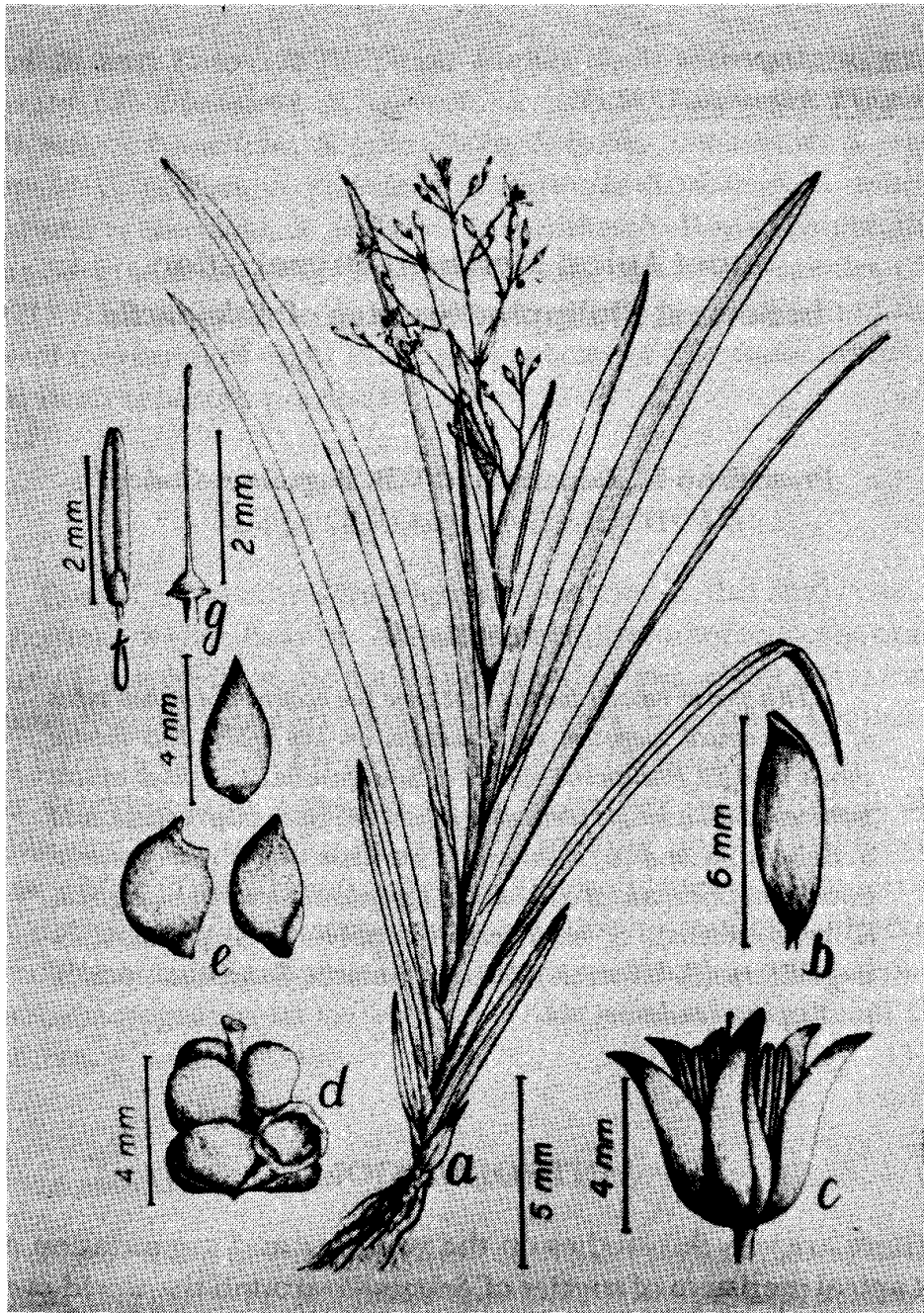


Figure 2. *Dianella ensifolia* L.

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|-----------|-----------|
| a) habit  | e) seeds  |
| b) petal  | f) anther |
| c) flower | g) pistil |
| d) fruits |           |