# Gongora

**Ruis** & **Pavon** Fl. Peruv. Prodr.117 t. 25 (1794)

ETYMOLOGY: ln dedication to Antonio Caballero y Gongora (1723-1796), Bishop of Cordoba, Spain, the Viceroy of New Granada (Colombia and Ecuador), Governor of Peru, and a patron of the Spanish botanist, naturalist and physician ]ose Celestino Bruno Mutis (1732-1808).

TYPE SPECIES: *Gongora quinquenerois* Ruiz & Pavon

DESCRIPTION: The unusual upside-down flowers of Gongora resemble dragons in flight, with petals partly fused to the column. Flower: Lateral sepals flare and curl back but are cupped in some species; the dorsal sepal points down and is partly joined to the column. Tiny petals, like spatulas with pointed tips, are fused at their bases to the column sides. The convoluted lip is fleshy, waxy, somewhat earlobe-like, with finger or hair-like protuberances. Flowers are medium sized 2 - 3" (5 - 7.5 cm), colorful, and mostly fragrant. Plant: Egg shaped pseudobulbs are deeply grooved. A few long (to 12" (30 cm), broad, and strongly pleated leaves spring from the pseudobulb tip. Several thick inflorescences hang from the pseudobulb, each flower's stalk also curving distinctively downward. Stanhopea flowers are much larger, with free petals (not attached to column); their pseudobulbs are squat and hardly furrowed.

DISTRIBUTION: Approximately 70 species dwell as epiphytes in low- to middle-elevation wet forest, from Mexico to Bolivia and Brazil.

ECOLOGY and HISTORY: Some Gongora plants grow in nests of ants, for example, the formidable trap jaw ant (Odontomachus), which aggressively defend the orchid. Other species provide hollow pseudobulbs perfect for ant colonies. Upward- pointing trash roots catch falling organic debris, providing nutrients typically scarce for epiphytes. Male euglossine bees pollinate the flowers, lured by an intricately blended scent. Each plant releases a unique combination of fragrance components, attracting just l of the more than 50 species of euglossines in the area, ensuring its pollen will be delivered only to flowers of the same species. As blossoms are notoriously similar, botanists often rely on "pollinator's judgment" to separate Gongora species. The bees collect scent from the lip's base, hanging precariously upside down. When departing compact flowers like *G. armeniaca*, they crawl backward down the column, contacting the pollinia. In open flowers like *G. quinquenervis*, the bee drops into flight and executes a simultaneous barrel roll, but often collides with the column, skidding onto the reproductive area. Flowers avoid self-pollination through sequential male and female phases, and encourage long-distance gene flow by synchronizing phases with other plants in the region.