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Ornamental Heliconias

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Cover photograph of *Heliconia rostrata* courtesy of *American Forests*

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Heliconias have long been popular horticulturally because of their showy inflorescences. They were so attractive that early explorers of the tropics returned to Europe with several species that became prized greenhouse specimens. Heliconias originally were classified as species of bananas because of their similar foliage. In 1771 Linnaeus established the new genus *Heliconia*, naming it after Helicon, a mountain in Greece, the home of Apollo and the muses.

Confusion exists about when some of the 100 to 150 species of heliconias were introduced into Hawaiian gardens from Central and South America. In tropical America, heliconias are often called "wild bananas"; locally, they are often referred to as "false birds of paradise."

Heliconias can be distinguished from both bananas and birds of paradise by their 4 to 30 conspicuous colored bracts and blue berries containing 1 to 3 seeds without tufts of orange hair.

The large boat-shaped bracts often hold water that serves as a breeding place for mosquitoes.

Natives in tropical America used the leaves for wrapping food for storage and cooking and as siding and roofing for houses. The underground stems were used as food, and the inflorescences for decorative purposes.

Heliconia plants are erect, from 1½ to 35 feet high, with various sized leaves. The stem is formed by the overlapping of the petioles, or the blades, of the leaves. Each leaf is composed of two halves separated by a tapering midrib.

The seedling soon develops an underground stem (rhizome) from which buds and new aerial stems arise. When the inflorescence emerges from the terminal growing point, it is fairly well developed. It consists of an elongated stem (peduncle) to which the bracts are attached. The bracts vary in size, texture, and color. The lowest bract is often sterile; others conceal flowers that vary in length, size, and color.

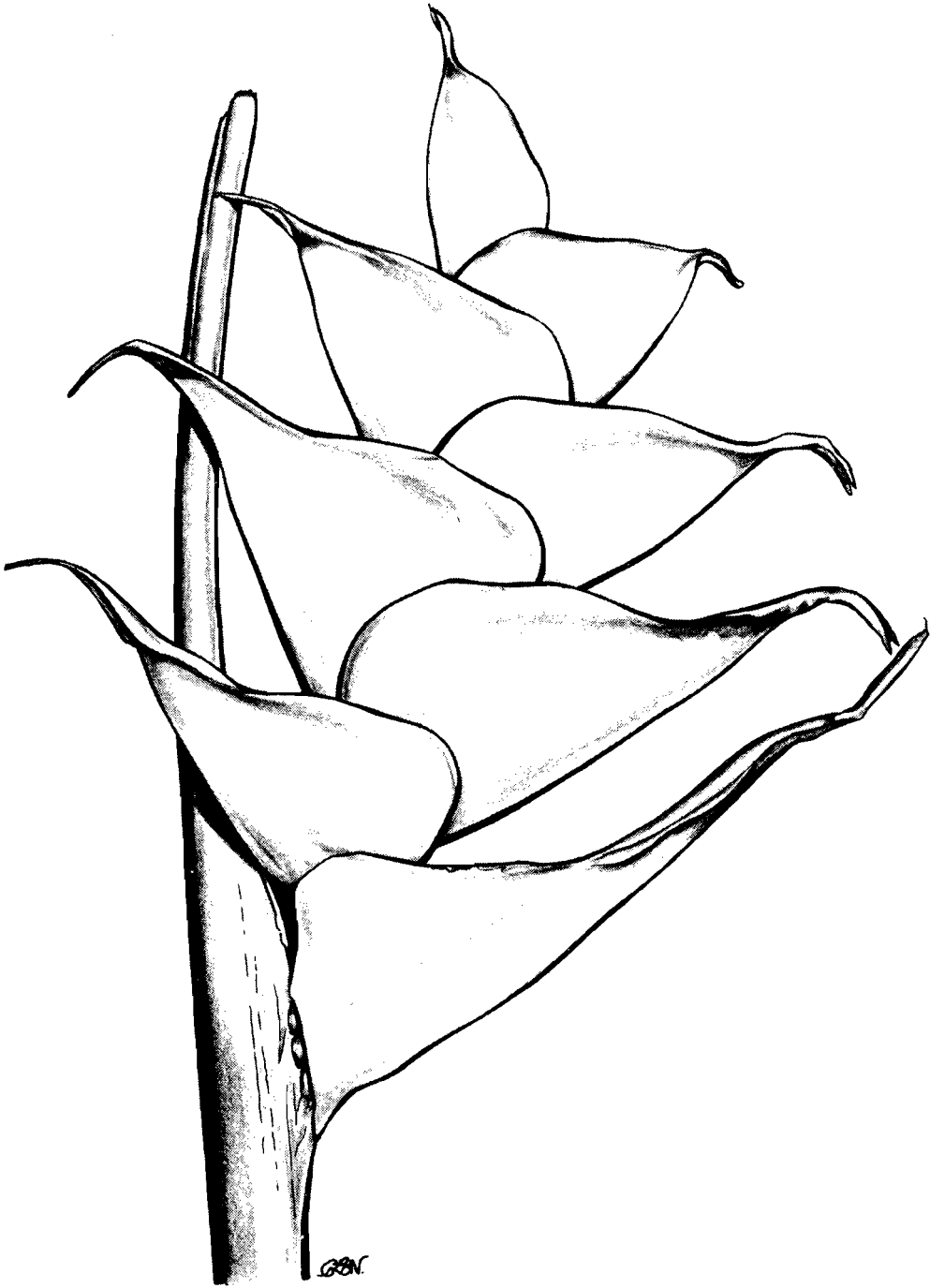


Fig. 1. Inflorescence erect and in one plane, *H. caribaea*.

Flowers contain one sterile stamen, five functional stamens, and three carpels. The flower secretes large quantities of nectar, making it attractive to hummingbirds, which may contribute to pollination.

The fruit is a one- to three-seeded berry, 1.5 cm in diameter, green or yellow when immature and dark blue when ripe. Seeds vary in size and shape, but they usually are three-sided, two sides flattened and the third rounded.

Some Common Species

In 1968, Dr. Robert R. Smith named and described the middle-American species of heliconias of Florida. With the help of this information, we can describe 13 species that are grown in Hawaiian gardens. They fall in the following four categories*:

1. *Inflorescence erect and in one plane*

- Heliconia aurantiaca* Ghiesbreght—orange bracts, yellow flowers
- H. aureo striata* Bull—green and yellow bracts, variegated leaves
- H. bourgaeana* O. G. Petersen—rose-colored spathe with green margins
- H. caribaea* Lamarck—large yellow bracts
- H. humilis* Jacquin—large red bracts
- H. psittacorum* Linnaeus f.—rosy-red bracts, conspicuous orange flowers
- H. wagneriana* O. G. Petersen—bracts with red base, yellow streak on top

2. *Inflorescence erect and in more than one plane*

- Heliconia metallica* Planchon and Linden ex Hooker—small green to yellow bracts
- H. latspatha* Benth—large orange bracts

3. *Inflorescence pendant and in one plane*

- Heliconia rostrata* Ruiz et Pavon—rose-colored bracts with green tips
- H. catheta* R. R. Smith sp. nov. var. *catheta*—red triangle at base of bracts, green tips

*Names based on Robert Roy Smith's "A Taxonomic Revision of the Genus *Heliconia* in Middle America," Ph.D. dissertation, University of Florida, 1968, University Microfilms, Inc., Ann Arbor, Michigan, 1971.

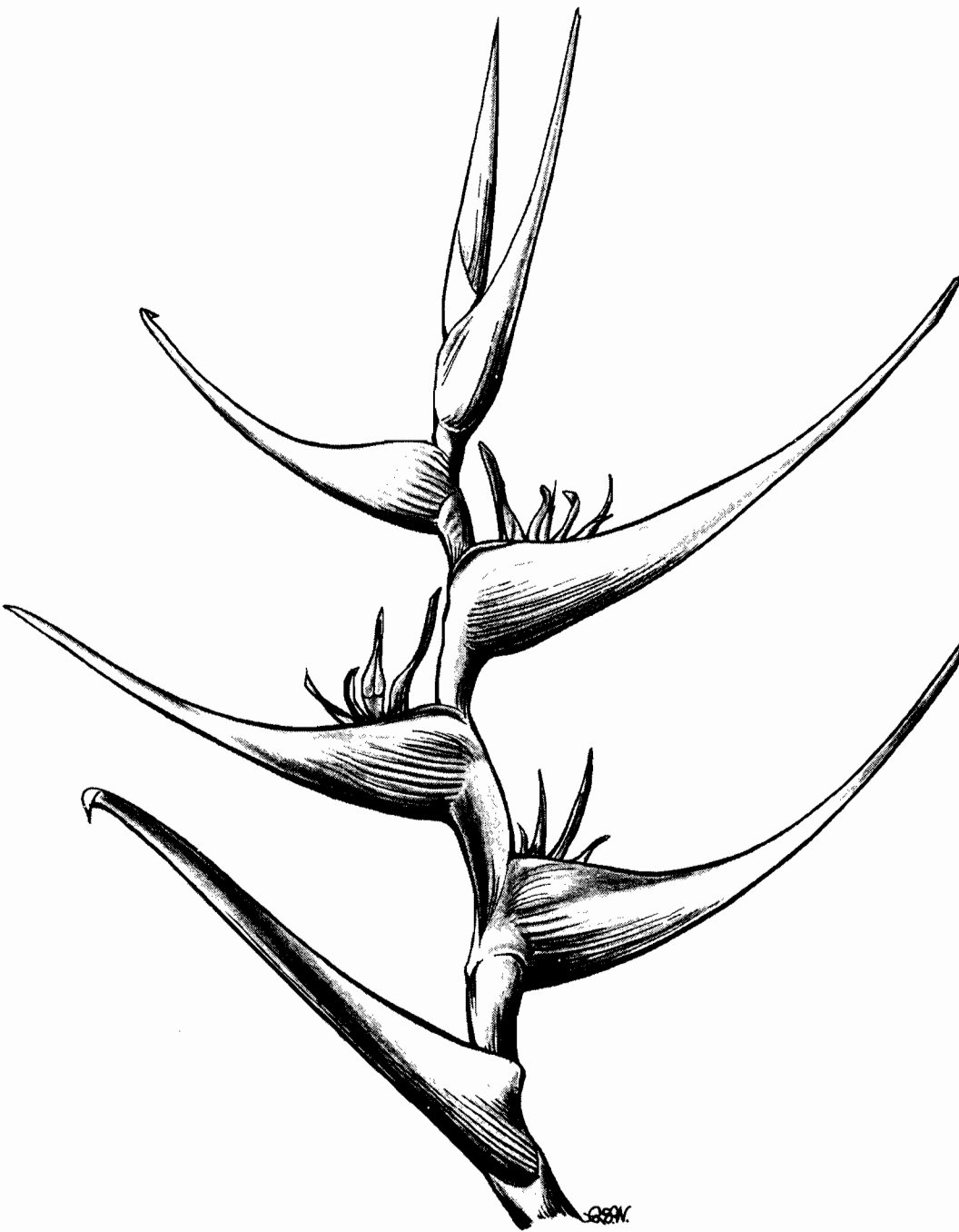


Fig. 2. Inflorescence erect and in more than one plane, *H. latispatha*.

4. *Inflorescence pendant and in more than one plane*

Heliconia collinsiana Griggs var. *velutina* R. R. Smith var. nov.—red triangle toward base of bracts, yellow tips

H. collinsiana Griggs var. *collinsiana*—red bracts covered with white bloom

Heliconia aurantiaca Ghiesbreght

Plants rarely more than 3 feet tall, leaf blades oblong, elliptical. Bracts orange or green with orange base. Conspicuous cream to yellow flowers, 2 inches long, attractive for cutting. Fruit dark blue. Often used in borders where it spreads quickly and makes an attractive mass effect. Leaves wilt when used as cut foliage.

Heliconia aureo striata Bull

Bracts large, short, thick, nontouching, pale yellow, and 5 inches long. Flowers pale green when fresh, protruding from bract. Leaves 6 to 12 feet long, dark green with yellow stripes. Midrib and occasionally the vein are rose colored. Flower has a good keeping quality for use as a decoration.

Heliconia bourgaeana O. G. Petersen

Vigorous plant, often 15 feet high, with large green leaves, pale green on the underside. Bright-red inflorescence, 1 to 2 feet high. Fat, boat-shaped bracts with green margins. Flowers green and white; fruit blue. This species is extremely ornamental and keeps well as a cut flower.

Heliconia caribaea Lamarck

Large, heavy plant, 12 to 15 feet high. Large, golden-yellow, short, erect, overlapping bracts, 5 inches long, especially broad and boat-shaped. Dull-green flowers dry to an unsightly brown as the bracts age.

Heliconia humilis Jacquin

Commonly called 'Lobster Claw Red.' Vigorous plant with leaves 8 to 10 feet high; bright-red bracts in shape of lobster claws. Upright flower stalk, up to 3 feet long, composed of a series of flat, keel-shaped bracts, 5 to 7 inches wide, with small green flowers almost completely concealed in spathes. As a cut flower, long lasting and extremely rigid. Makes a good garden plant where there is plenty of space for it to spread.

Heliconia psittacorum Linnaeus f.

Dwarf form with leaves 2½ to 4 feet high. Many flower stalks, conspicuous among leaves. Large, rosy-orange bracts, 2 to 3 inches long; three to seven conspicuous, orange, tubular flowers with black tips.



Fig. 3. Inflorescence pendant and in one plane, *H. rostrata*.

Although the flowers drop as the inflorescence matures or is cut, plant spreads rapidly and makes a good garden plant for foundation plantings or to rapidly cover the soil in partially shaded, damp locations.

Heliconia wagneriana O. G. Petersen

Medium-sized plant up to 15 feet high. Bracts 5 inches long, orange-pink with green, later yellow, strip along the border of each bract. Because flowers are concealed, makes a decorative cut specimen.

Heliconia metallica Planchon and Linden ex Hooker

Medium-sized plant. Lower surfaces of leaves tinged with purple. Erect inflorescence, bracts 6 inches long, pale green with conspicuous orange flowers. Useful as a garden plant.

Heliconia latispatha Bentham

Plant 7 feet high, leaves pointed, large, erect inflorescence in more than one plane. Lowest bract is highly developed into a leaf-like blade. Pumpkin-orange bracts from 4 to 7 inches long. Two lowest bracts with the leaves are longer. Flowers yellow to yellow-green.

Rampant growth that does not suit small gardens; artistic design of the inflorescence unique and suitable for large tropical flower arrangements.

Heliconia rostrata Ruiz et Pavon

Leaves 3 to 7 feet high, green on both sides. Hanging inflorescence of inverted, recurved, rose-red, yellow, and green-tipped boat-shaped bracts. Bases of the bracts do not touch, and the flower stalk is scalloped. Popular for floral displays. Is not longlasting but will dry into an attractive brown specimen.

Because of its smaller size, this species makes a usable garden planting.

Heliconia catheta R. R. Smith sp. nov. var. *catheta*

Plant 15 feet high, leaves green on both sides, pendant inflorescence. Is composed of rose-red bracts with green margins, 8 to 10 inches long, widely spaced on stalk. Yellow flowers.

Heliconia collinsiana Griggs var. *velutina* R. R. Smith var. nov.

Large plants 12 to 15 feet high. Pendant inflorescences with widely separated bracts, 6 to 12 inches long and in more than one plane. Bracts have a red triangle

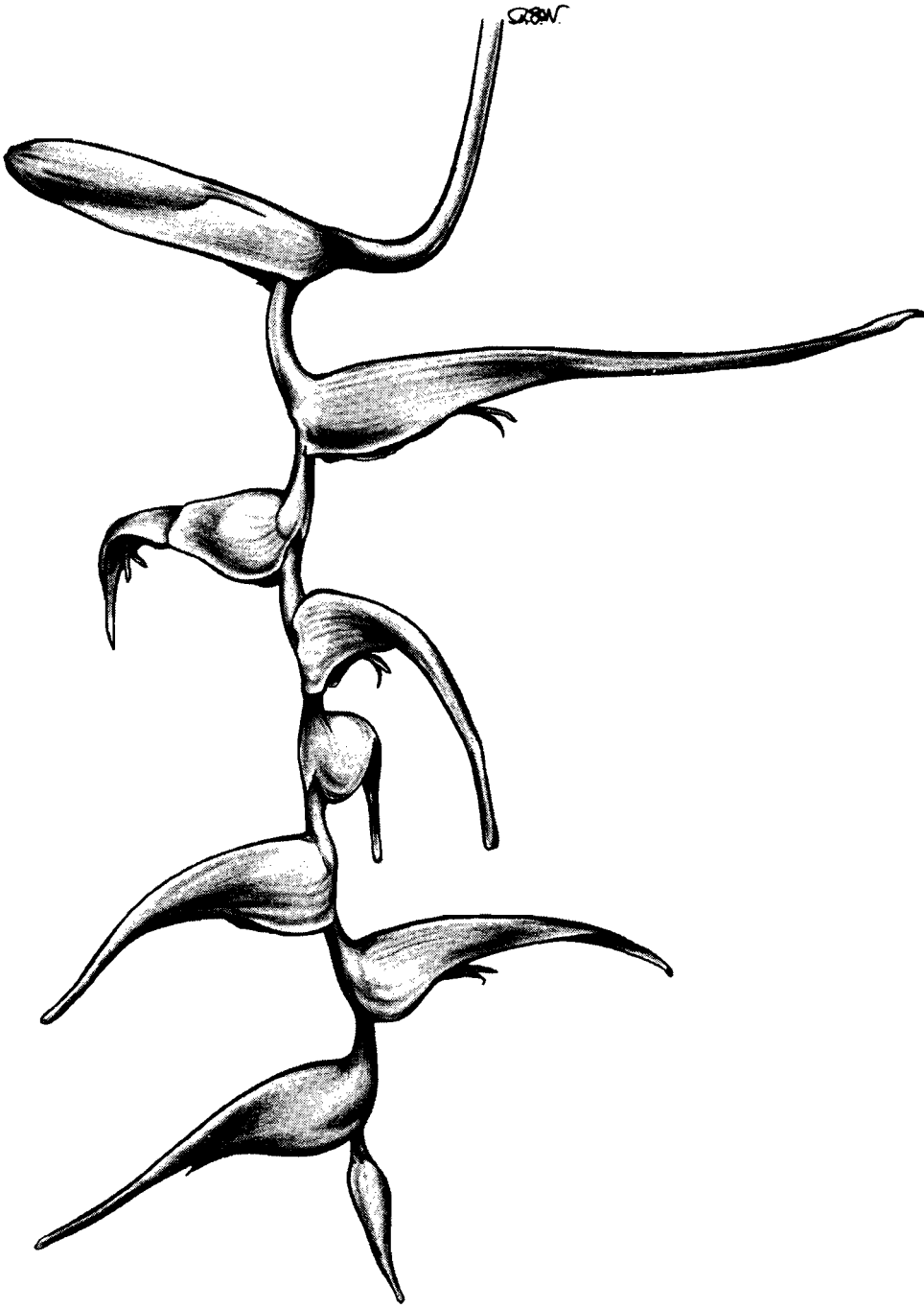


Fig. 4. Inflorescence pendant and in more than one plane, *H. collinsiana* var. *velutina*.

toward the base, with chartreuse to yellow tips that usually hide the yellow to orange flowers.

Cut stalks are used in flower arrangements. Plants are extremely large for small gardens.

Heliconia collinsiana Griggs var. *collinsiana*

Large, pendant, swinging inflorescence, borne on tall stalk among large leaves, often up to 12 feet high of red, narrow, pointed bracts covered with white bloom. Large bracts range 2 to 4 inches long with 2 to 3 inches between the attachment to the flower stalk.

Several orange flowers protrude beyond each bract. This species keeps well and is useful for large arrangements in tropical and contemporary settings. The plants spread rapidly and require large space as a garden plant.

Cultural Notes

Heliconias are usually propagated by division of the roots or underground stems and planted 2 feet apart in rich, deep, porous soil. New upright stalks arise from the tips of lateral underground stems. Growth will be rapid if you limit the amount of water until the aboveground shoots are developed. When shoots are 8 to 10 feet high, water abundantly and fertilize heavily. Plenty of sunlight is recommended.

To harvest flower stalks, remove the whole stem by cutting it at the soil level to induce the production of new stems. After 4 or 5 years, the roots and underground stems become thick. Division and replanting will increase the yield of flowering stems. Rarely is injury from insects and diseases a serious problem.

Flowering is most common in late spring and summer months.

Care of Cut Flowers

Most heliconias will have a longer shelf life if the leaves are removed when they are harvested. To improve the appearance of the bracts, wash them in water with a little detergent and rinse them with fresh water. Removal of the flowers will often improve the appearance of the bracts. To lengthen their keeping quality, soak the bracts in fresh water for 30 minutes every 3 days. Cut heliconias will respond to the use of chemical preservatives in the water and the presence of indirect sunlight. Never refrigerate cut stems.

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