Introduction

Celosia has two types of flowers, the cockscomb, *Celosia cristata* and the plume types, *Celosia plumosa* (Fig. 1). The tight, velvety texture of the Cockscomb flowers look like brain tissue to some people. The fluffy, light, airy texture of the plume types blow freely in a breeze and are planted more often. Both come in a variety of colors.

General Information

Scientific name: *Celosia plumosa*

Pronunciation: see-LOE-see-uh ploo-MOE-suh

Common name(s): Cockscomb

Family: *Amaranthaceae*

Plant type: annual

USDA hardiness zones: all zones (Fig. 2)

Planting month for zone 7: Jun; Jul

Planting month for zone 8: May; Jun; Jul

Planting month for zone 9: Apr; May; Jun; Jul; Aug; Sep; Oct; Nov

Planting month for zone 10 and 11: Apr; May; Jun; Jul; Aug; Sep; Oct; Nov

Origin: not native to North America

Uses: edging; mass planting; container or above-ground planter

Availability: generally available in many areas within its hardiness range

Description

Height: .5 to 2 feet

Spread: .5 to 1 feet

Foliage

Leaf arrangement: alternate

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2. Edward F. Gilman, professor, Environmental Horticulture Department, Teresa Howe, coordinator - Research Programs/Services, Gulf Coast REC, Bradenton, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611.
Figure 2. Shaded area represents potential planting range.

Leaf type: simple
Leaf margin: entire
Leaf shape: linear; oblong
Leaf venation: bowed
Leaf type and persistence: not applicable
Leaf blade length: 2 to 4 inches
Leaf color: purple or red
Fall color: not applicable
Fall characteristic: not applicable
Flower
Flower color: yellow; pink; purple; orange
Flower characteristic: showy

Fruit
Fruit shape: no fruit
Fruit length: no fruit
Fruit cover: no fruit
Fruit color: not applicable
Fruit characteristic: inconspicuous and not showy

Trunk and Branches
Trunk/bark/branches: not applicable
Current year stem/twig color: green
Current year stem/twig thickness: medium

Culture
Light requirement: plant grows in full sun
Soil tolerances: acidic; sand; loam; clay
Drought tolerance:
Soil salt tolerances: unknown
Plant spacing: 6 to 12 inches

Other
Roots: not applicable
Winter interest: not applicable
Outstanding plant: not particularly outstanding
Invasive potential: may self-seed each year
Pest resistance: long-term health usually not affected by pests
Use and Management

The plants prefer a fertile, moist soil with lots of organic matter. They do best in full sun but will tolerate partial shade. The flowers can be dried with red flowers giving best results. Any check in growth of young plants will bring them into bloom prematurely. This spoils later blooming. Causes of premature blooming are exposure to cold temperatures when planted too early, or remaining in packs or flats too long in the spring. Celosia grows one to one and a half feet tall and is spaced 10 to 12 inches apart.

The heads may be larger if the seed is planted directly into the garden. If started indoors they germinate in one week at 70 to 75 degrees. Plant indoors six weeks before the desired outdoor planting date. Seedlings should be grown warm and on the dry side.

Cristata cultivars include the dwarf ‘Jewel Box’ and ‘Olympia’ series and the taller (18 to 24 inches) ‘Floradale’ and ‘Chief’ series. Plumosa series and cultivars include the dwarf ‘Kimono’ and ‘Geisha’ series and the taller types including ‘Apricot Brandy’, ‘Castle’ series, ‘Century’ series, ‘Forest Fire’ and ‘New Look’.

Mites can cause loss of healthy green foliage coloration but this pest is not common on Celosia.

Pests and Diseases

Leaf spots may occasionally attack Celosia but the problem is not serious.