**Introduction**

Celosia has two types of flowers, the cockscob, *Celosia cristata* and the plume types, *Celosia plumosa* (Fig. 1). The tight, velvety texture of the cockscob 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.

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**General Information**

Scientific name: *Celosia plumosa*
Pronunciation: see-LOE-see-uh ploo-MOE-suh
Common name(s): cockscob
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

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**Description**

Height: .5 to 2 feet
Spread: .5 to 1 feet
Plant habit: upright
Plant density: moderate

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2. Edward F. Gilman, professor, Environmental Horticulture Department; and Teresa Howe, coordinator, Research Programs/Services, Gulf Coast Research and Education Center, UF/IFAS Extension, Gainesville, FL 32611.

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Growth rate: moderate  
Texture: fine

Foliage
Leaf arrangement: alternate  
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  
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°F to 75°F. 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’.

Pests and Diseases
Mites can cause loss of healthy green foliage coloration but this pest is not common on celosia.

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