



***Cosmos bipinnatus*¹**

Edward F. Gilman, Teresa Howe²

Introduction

The Sensation-type cosmos is from tropical America and is grown as an annual primarily for its beautiful flowers (Fig. 1). These plants can attain a height of 3 to 6 feet and have an open and sprawling habit. Finely cut and thread-like simple leaves are pinnately cut into deep lobes appearing compound. They are held upright by thin, weak stems. *C. sulfureus* has foliage that is not as finely divided. The flowers of this series of *Cosmos* occur in the summer for early blooming varieties and in the fall for late blooming varieties. These large, showy flowers occur in a number of pastel colors including red, lavender, pink, white, violet and rose. They are 2 to 3 inches in width and are daisy-like in appearance. The lovely flowers are borne in capitula with small discs, and the rays are toothed at their apices.

General Information

Scientific name: *Cosmos bipinnatus*

Pronunciation: KOZ-mus bye-pin-NAY-tus

Common name(s): Mexican Aster, Sensation Cosmos

Family: Compositae

Plant type: annual

USDA hardiness zones: all zones (Fig. 2)

Planting month for zone 7: Jun

Planting month for zone 8: May

Planting month for zone 9: Mar; Sep; Oct

Planting month for zone 10 and 11: Feb; Nov; Dec

Origin: not native to North America

Uses: border; attracts butterflies

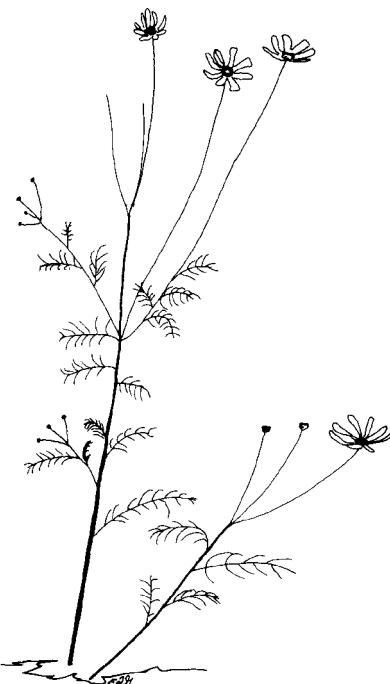


Figure 1. Mexican Aster.

Availability: somewhat available, may have to go out of the region to find the plant

Description

Height: 1 to 4 feet

Spread: 2 to 3 feet

Plant habit: upright

Plant density: open

1. This document is Fact Sheet FPS-148, one of a series of the Environmental Horticulture Department, Florida Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida. Publication date: October 1999. Please visit the EDIS web site at <http://edis.ifas.ufl.edu>.
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.

Growth rate: moderate

Texture: fine

Foliage

Leaf arrangement: opposite/subopposite

Leaf type: simple

Leaf margin: lobed

Leaf shape: variable

Leaf venation: not applicable

Leaf type and persistence: not applicable

Leaf blade length: 4 to 8 inches

Leaf color: green

Fall color: not applicable

Fall characteristic: not applicable

Flower

Flower color: lavender; white; red; pink; rose; violet

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: thin

Culture

Light requirement: plant grows in full sun

Soil tolerances: sand; acidic; slightly alkaline; loam; clay;

Drought tolerance: moderate

Soil salt tolerances: unknown

Plant spacing: 12 to 18 inches

Other

Roots: not applicable

Winter interest: not applicable

Outstanding plant: not particularly outstanding

Invasive potential: not known to be invasive

Pest resistance: long-term health usually not affected by pests

Use and Management

The Sensation-type Cosmos are largely used for cutting flowers because they grow too tall and fall over in the landscape. They can be employed as landscape plants if you do not mind them falling over onto other plants nearby. Early pinching causes branching and can increase the density of the plants.

Cosmos needs to be planted in an area of the landscape that receives full sun. It tolerates dry, porous soils and will produce foliage instead of flowers if heavily fertilized. Plants need to be supported or staked to prevent them from falling over. Place these plants 12 to 18 inches apart in the garden.

The propagation of Cosmos is primarily accomplished by seed which can be directly sown in the garden. The seeds of these plants will germinate in approximately one week and bloom in 2 to 3 months.

Cultivars are included in the Imperial Pink, Sensation, Sonata and Vega series.

Pests and Diseases

Cosmos species may be occasionally bothered by bacterial wilt, canker, powdery mildew, leaf spots, aphids, and Japanese beetles.

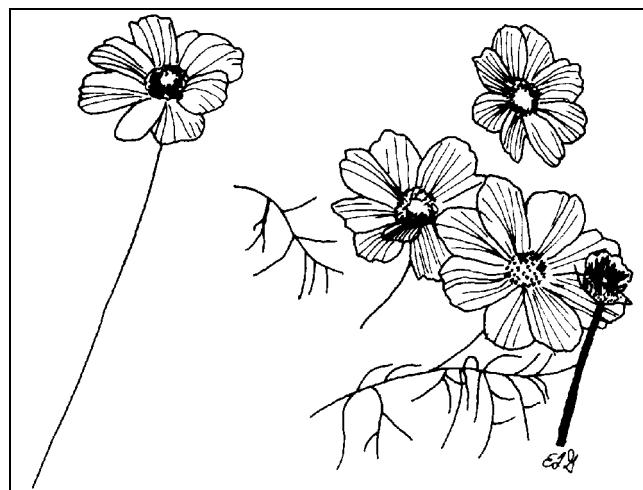


Figure 3. Flower of Mexican Aster