



Cooperative Extension Service  
Institute of Food and Agricultural Sciences

## ***Cosmos bipinnatus***<sup>1</sup>

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### **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

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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