

Ivy Geranium Cultivars Resistant to Oedema

Allen Botacchi

Cooperative Extension Educator –Commercial Horticulture

Oedema is a physiological disorder which affects many ivy geraniums. Many corky spots, which vary in size, develop mainly on the underside of the older leaves. In severe cases the spots may also be present on the upper leaves. These blotches of corky tissue are actually ruptured plant cells. If you rub your fingertips across the blotch, it almost feels like sandpaper. Plants repeatedly stressed by exposure to extreme environmental and cultural conditions are especially prone to this problem.

The interaction of the following factors influence the degree of oedema expression:

Light, Growing Media, Temperature

Fertility, Relative Humidity, Irrigation

Optimum conditions for ivy geranium growth with minimal oedema expression are:

1. Moderate light intensities–2500 - 4000 footcandles (definitely lower than for zonals).

2. Maximum air temperatures (75° - 85°F).
 3. Moderate relative humidity levels (60% - 70% R.H.).
 4. Selection of a light, well-drained growing medium that has a good cation exchange capacity (incorporate 1/4 mineral soil maximum and pH adjusted 5.7 - 6.1).
 5. Maintenance of a well-balanced fertility program, monitoring phosphorus, magnesium, iron and nitrogen closely.
 6. Proper watering techniques, including watering only in the morning and removing saucers from hanging baskets.
- Ivy Geranium Cultivars vary considerably in resistant to oedema. The following cultivars are listed in order of decreasing tolerance.

Double Lilac White
Sugar Baby
Salmon Queen
Galilee
Rigi
Princess Balcon
Spain
Madeline Crozy
King of Balcon
Rouletta
Sybil Holmes
Pascal
Balcon Imperial
Cornell
Beauty of Eastbourne
Yale
Amethyst

References

- Mastalerz, J. W. and E. J. Holcomb. 1982. *Geraniums III* published by the Pennsylvania Flower Growers p. 170-176.
- Tayama, H. K. 1988. *Tips on growing zonal geraniums*, Ohio Cooperative Extension Service Bul. FP-765:7,8.