

6-27-2005

Abiotic Flower Diseases

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Recommended Citation

Sagers, Larry A., "Abiotic Flower Diseases" (2005). *All Archived Publications*. Paper 1362.
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Abiotic Flower Diseases

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Problem	Host(s)	Symptoms	Controls	
			Cultural	Chemical
Air Pollution	Many	Upper leaf surface bleached with white or brown spots Older leaves more affected than young Leaf distortion	Localized problem, usually where exhaust hits flowers Choose heat and drought tolerant plants; They are usually more resistant	None
Allelopathy	Soleonaceous plants & some others	Poor growth May cause a wilt-like symptom in flowers and vegetables	Avoid planting susceptible plants around walnut trees, including petunias and nicotiana Avoid walnut sawdust and mulch unless aged for at least one year.	None
Dodder	Many plants Petunias are often attacked	Orange, leafless, twining, parasitic vine that attacks the plants and derives nourishment from them Looks like a weed - comes from the ground	Remove infested plants and all traces of dodder	None recommended for flowers Where areas are severely infested, apply trifluralin, pendimethalin or other pre-emergent
Edema (oedema)	Geranium	Water-soaked spots that eventually dry and crack Affected leaves may fall	Avoid overwatering Improve soil drainage Usually a problem in wet, cool weather No pest involved (cultural problem)	None
Fertilizer Deficiency	All plants	Symptoms vary depending on which element is deficient Most show as a lack of chlorophyll	Match plants to environmental growing conditions so that problems do not develop	Add fertilizer as needed to soil to supplement natural growth
Fertilizer Excess	All plants	Burning of leaves Slow growth	Avoid excess fertilizer Choose fertilizers with low salt indexes Leach excess salts with water	None
Iron Chlorosis	Many plants	Pale-green or yellow leaves Dark-green veins	Do not overwater Select plants not susceptible to chlorosis Avoid planting in heavy alkaline soils	Treat with iron chelate

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Mechanical Damage	All plants	Chopped or destroyed plant tissues including stems, leaves, and roots	Use care when cultivating and weeding Keep people and animals out of plant beds Use barriers to restrict traffic	None
Salt	All plants	Burning of leaves Slow growth Plants from seeds often do not start to grow	Avoid planting sensitive plants in areas of high salinity Avoid excess fertilization Choose low salt index fertilizers Leach well-drained soils with water	None
Scorch	All plants	Burned, dry leaves Plants with larger leaves are usually affected most seriously Problems intensify during hot weather or with hot, dry winds	Plant varieties that tolerate growing conditions Water as needed Protect young, tender plants from scorching winds	None
Shade	All sun-loving plants	Long, spindly stems Few or no flowers	Choose varieties that are adapted to growing conditions Remove lower branches on trees or shrubs if appropriate	None
Short Stems	All plants can be affected, but most common on tender plants	Shortened stems on leaves and flowers Plants have a stunted dwarfed appearance	Choose appropriate plants for each growing location Stress can affect plants and cause them to grow poorly	None
Small Flowers	Chrysanthemums, Dahlias Carnations, other flowers	Many small flowers rather than a few large, showy flowers	Pinch off the side flower buds as soon as possible, earlier removal means larger flowers	None
Sunburn	Most common on shade-loving plants	Burned flowers or leaves Usually destroys chlorophyll giving a faded or burned appearance	Use plants in appropriate environments Grow shade-loving plants under natural or artificial shade	None
Transplant Shock	All potted plants that are transplanted to a new location	Flowers, buds and leaves fall off Plants may wilt and die or stop growing after transplanting	Plant when temperatures are cool in early morning or late afternoon Transplant small rather than large plants Keep roots intact. Water as needed	None