

# Elderberries

Elder or Elderberry (*Sambucus*) is a genus of between 5-30 species of shrubs or small trees (two species herbaceous), formerly treated in the honeysuckle family Caprifoliaceae, but now shown by genetic evidence to be correctly classified in the moschatel family Adoxaceae. The genus is native to temperate to subtropical regions of both the Northern Hemisphere and the Southern Hemisphere; the genus is more widespread in the Northern Hemisphere, with Southern Hemisphere occurrence restricted to parts of Australasia and South America.

The leaves are opposite, pinnate, with 5-9 leaflets (rarely 3 or 11), each leaf 5-30 cm long, the leaflets with a serrated margin. They bear large clusters of small white or cream coloured flowers in the late spring, that are followed by clusters of small red, bluish or black (rarely yellow or white) berries. Species have lifespans between 80 and 100 years.

The berries are a very valuable food resource for many birds. Elders are used as food plants by the larvae of some Lepidoptera species including Brown-tail, Buff Ermine, Dot Moth, Emperor Moth, The Engrailed, Swallow-tailed Moth and The V-pug. The crushed foliage and immature fruit have a strong fetid smell. Dead elder wood is the preferred habitat of the mushroom *Auricularia auricula-judae*

## Site

In its natural habitat, the elderberry is commonly found on fertile, moist soils. Under cultivation, it is tolerant to a wide range of soil conditions, but grows best on well-drained loam soils. Good soil drainage should be considered in site selection. An open field located away from woods allows free air movement, reducing disease problems, frost and potential insect and bird damage.

## Soil Preparation

Elderberries are a perennial crop that require proper soil preparation before planting. A soil test will help determine existing nutrient levels and ultimately the suitability of the site. On sandy soils or soils low in fertility, organic matter such as manure or peat should be incorporated prior to planting to increase moisture retention and provide nutrients. The site should be cultivated and properly drained prior to planting. Eradication of perennial weeds prior to planting by cultivation and/or herbicides will help improve plant establishment. On heavy or poorly drained soils, plant vigour may be improved by planting on raised beds.

## ELDERBERRY QUICK GUIDE

### Latin Name

*Sambucus nigra*

### Type

Shrub

### Site and Soil

Sunny (part shade is OK).  
Soil well drained, well-dug and composted before planting.

### Plant to Harvest Time

2 years



## **Plants**

Elderberry plants should be disease free. Although elderberries are tolerant to improper conditions, care should be taken to prevent roots from drying out before planting.

All elderberry cultivars are considered partially self-fruitful. Cross-pollination increases fruit production, therefore two or more cultivars should be planted in close proximity.

## **Planting Distances**

Planting distances of 1 metre in the row and 4-5 metres between rows will establish a hedgerow within three growing seasons. In home gardens, plants may be closer together with at least 2 metres between plants in any direction.

## **Setting Plants**

Planting should be done in early spring. The depth at which elderberry plants are set may vary as long as the roots are well covered and the soil firmly packed. It is suggested, however, to set them at the same depth as grown in the nursery. Watering at or immediately following planting will improve initial root establishment and subsequent plant growth.

## **Care of Planting**

### ***Weed Control/Mulching***

Weeds may be suppressed by shallow, careful cultivation in rows and between plants. Mulch such as straw, sawdust, or well composted material around the plants may also help control weeds. A hedgerow of vigorous elderberry plants will help suppress weeds. Perennial weeds such as quackgrass and goldenrod are difficult to control within the hedgerow and should be eliminated prior to planting or as they appear within the planting.

### ***Irrigation***

Elderberry plants need approximately 25 mm of water each week from bloom time to the end of harvest. If rainfall is lacking, plants should be irrigated for optimum plant growth and fruit production. Plants should also be watered if prolonged dry periods occur after harvest.

### ***Pruning***

During the first two seasons plants should be encouraged to grow vigorously with little to no pruning required. After the second year, pruning should be done annually in early spring. All dead, broken and weak canes should be removed. Three-year-old canes should be removed as they produce less fruit and appear to be more prone to winter injury. Removal of older canes will encourage the growth of new, more fruitful canes.

Mowing of all the canes in a mature planting may be a method of reducing labour costs while encouraging growth of new canes. The disadvantage of this system is that there is a loss of production in the season following mowing as there is limited production on the one-year-old canes.

### **Harvesting**

Elderberry fruits normally mature between mid-August and mid-September. Clusters ripen over a period of 5-15 days and are easy to harvest. Fruit in containers should not be held at room temperature for more than 2-4 hours as internal heating reduces quality and causes rapid spoilage. Yields of 12-15 lbs. (5.5-6.8 kg) of fruit can be expected per plant in 3-4 years if managed properly.

### **Propagation**

Elderberries are easily propagated from hardwood or softwood cuttings, root cuttings, or suckers. Dormant hardwood cuttings with two or more nodes can be taken from one-year-old canes in early spring and set directly in nursery rows or their permanent location. Fall cuttings from one-year-old canes can be used also. Fall cuttings can be wrapped in plastic to reduce moisture loss and stored in a cool dark place until spring. Cuttings should be set in soil so that only the top pair of buds are above the soil surface.

### **Diseases**

Tomato Ringspot Virus is among the most serious diseases affecting elderberries. It is spread by nematodes and through pollen transfer. Dandelions and some other weeds can also carry this virus. It results in weakened plants, reduced productivity and eventually plant death. To control the virus, the soil should be tested for nematodes prior to planting, and fumigated if necessary. Wild elderberry plants within an area of 100 ft. (31 metres) surrounding cultivated plants should be eradicated also.

Stem and twig cankers (*Cytospora*, *Nectria*, and *Sphaeropsis*) are among the fungus diseases which can be controlled by pruning and burning of infected canes. Powdery mildew can affect canes and berries in late summer and early fall. It results in a grey appearance on the berries, but does not lower the quality of the juice. Leaf spotting fungi, thread blight, root rots, and *Verticillium* are among the less common diseases.

### **Pests**

Birds are the major pest affecting elderberries. They eat the fruits, and can be a serious problem in small plantings. Control measures include noise cannons, distress calls and prompt harvesting of ripe fruit, but the most effective means is netting.

### **Elder Shoot Borer**

The larva is yellowish white with a double row of black dots across each body segment and a black head. It feeds inside the stem and may cause substantial dieback and loss of canes. Infested and dead canes should be cut out in the fall to

destroy overwintering eggs. The adult is a moth with rust red forewings mottled with grey and yellowish grey hind wings.

### ***Sap Beetles***

Adult beetles are 5 mm in length, black with four yellow spots on the elytra. The beetles become a problem when fruit is damaged or overmature, as they are attracted by fermenting sugars. Sap beetle larvae can also be a problem. As the blooms form larvae will tunnel into the base of the bloom and feed in the centre of the flower cluster.

### ***Eriophyid Mites***

These tiny mites, visible only under microscope, attack the leaves and cause the edges to roll and yellow bands to appear. They can be controlled by dormant sprays, but their damage is normally not serious.

### ***Other Insects***

The adult beetles of the elder borer are present during June and July and cause notches on elderberry leaves. Two-spotted spider mites also affect the elder and can reduce the crop by 75% when the numbers are high. Additional insects include aphids, potato flea beetles, grape mealy bugs, thrips, San Jose scale, currant borer and rose chafer.