FABA BEAN

broad-bean, fava-bean, Windsor-bean, haba (Span.)

*Vicia faba* L. (*syn. Faba vulgaris*)

Fabaceae (Leguminosae), Bean family

**ECHO PLANT INFORMATION SHEET**

**ORIGIN** – Faba-bean is known only as a cultivated species. Its presumed origin is somewhere in the Middle East where it has been cultivated for thousands of years. Faba-bean is a cool season grain legume, now widely distributed in temperate environments around the globe. Its geographic spread began early, a record of its introduction to China dates before 2800 B.C. Faba-bean is a favorite bean species in Europe; the Middle East; the Nile River valley regions of Egypt, Sudan and Ethiopia; and India and Burma. It is also grown in parts of Australia and the Americas, especially at high elevations in Mexico, Brazil, and the Andes. It is grown chiefly as a feed grain in the United States, Canada, and northern Europe.

**USES** – Faba-bean is perhaps the oldest dual use food and feed legume species. It was cultivated by ancient Romans both as a food plant and as feedstuff for horses and oxen. Historically, the large-seeded, mild-flavored, sweet forms of faba bean have been selected for food use. Faba-bean is eaten as a potherb, vegetable, or pulse. The small-seeded, bitter, and less sweet varieties have been developed for animal feed. Examples are field-bean, horsebean, and tick-bean. Feed bean varieties are used for grain, forage, or silage. Faba-bean’s efficient nitrogen-fixing capability makes it a good choice as a ground cover or green manure species.

**CULTIVATION** – In cool temperate regions, faba-bean is planted in early spring. In warm temperate and subtropical regions, it often is planted in the autumn as a winter season crop. Cold-hardy varieties tolerate low temperatures well (to –10C; 14F). Faba-bean is the least drought tolerant of legume crops. Moderate rainfall (650-1,000 mm; 25-40 in) well-spaced throughout the growing season is desirable. Faba-bean’s maturity time varies widely, from 90 days to over 120 days, depending upon variety and growing conditions. Faba-bean does not set seed at high temperatures. If possible, shade plants exposed to hot sun during flowering. Soil mulch also will help reduce high surface temperatures. Usually, faba-bean seeds are planted 5-10 cm (2-4 in) deep, spaced 15 cm (6 in) apart, in rows 75-80 cm (30-32 in) apart. Sometimes seeds are broadcast, especially plantings used for forage. Weed control is important, especially during the early growth stages. Inoculate seeds with a *Rhizobium* species designated for vetches, if neither faba-bean nor other legume crops have been grown previously on the site. Normally, seed inoculation is not required if faba beans have been grown previously on the site.

**Harvesting and Seed Production** – Faba-bean pods are harvested while the pods are still green. Lower pods mature first. Make periodic (5- to 7-day) harvests from the bottom to the top of the plant. Harvests for dry seeds need to be done after lower pods are mature but just before upper pods are fully mature. Later harvests produce large amounts of shattered seeds. To reduce seed shatter, whole plant harvests should be done at night or during cloudy days. Thresh and winnow harvested plants to obtain the seeds. To use faba-beans for silage, cut and swath the bean plants after the lower pods blacken. Allow swathed beans to wilt for 1-3 days before chopping and storing them.
PESTS AND DISEASES – A series of fungal, bacterial, and viral diseases attack faba beans. Fungal
diseases include stem rots, black root rot, root rots, downy mildew, rust, and chocolate spot, among
others. Broomrape, *Orobanche crenata*, is a parasitic seed plant on Mediterranean faba-beans.
Various aphids and weevils, a pea thrip, cowpea bean beetle, and Egyptian leaf worm infest faba bean
plants. Disease and pest control is best done using locally approved methods. A suggested control of
black aphids is to pinch off infested flower tips and burn them to retard the spread of this pest species.

COOKING AND NUTRITION – Both the tender green pods and the shelled beans may be eaten as
cooked vegetables. Faba-bean leaves also have been listed as a cooked vegetable source. Faba-beans
equal lima beans in protein content and exceed the iron content of peas and snap beans. Faba-beans in
the pod may be simmered, steamed, or stir-fried. Shelled older beans make a good cooked side
vegetable or an addition to meat dishes. The seed coats or “skins” often are removed before eating as
the coats are tough to chew. Mature seeds can be fermented or baked. They are used in bean cakes in
the Mediterranean region and in porridge in Ethiopia. A favorite Middle Eastern dish, *falafel*, is
prepared from deep fried cotyledon (seed leaf) paste mixed with spices and vegetables. Nabet soup is
made from boiled germinated beans. Faba-beans sometimes are roasted like peanuts or popped like
popcorn. Faba-beans are best eaten cooked. These beans contain substances which produce an
allergic reaction called *favism* in some persons, mostly in males of Mediterranean region descent.
The reaction normally is temporary and seldom occurs from eating well-cooked faba-beans.