FAVA BEAN

Faba Bean, Broad Bean, Windsor Bean

Vicia faba   Fabaceae

ECHO® PLANT INFORMATION SHEET

Description

Vicia faba is an annual herbaceous plant from the legume family, usually considered to contain three subspecies: *V. faba* ssp. *major* (broad bean), *V. faba* ssp. *equina* (horse bean), and *V. faba* ssp. *minor* (tick bean or pigeon bean). Plants are upright, reaching heights of 1.5-2 m. Leaves of *V. faba* are alternate and pinnately compound, with 2-6 leaflets per leaf. One to six white flowers are borne on racemes, with a central dark spot similar to pea flowers.

Uses

The broad bean subspecies contain large-seeded varieties important globally for human consumption. Horse bean and pigeon bean subspecies are critical fodder crops for many parts of the world. Though the *V. faba* utilized at ECHO is a smaller-seeded variety than most broad beans, it has been developed for human consumption. The benefits of smaller beans have to do with reduced cooking time and reduced splitting during the drying and preservation process.

Common Names

- Spanish
    - Haba
    - Haba
    - habichuela
    - haba común
    - Fabera
- French
    - Fève
- Portuguese
    - Fava
- German
    - Ackerbohne

Cultivation

- **Elevation –** 1200-2700 m in the tropics

- **Rainfall –** 700-1000 mm/year; tolerant of waterlogging (compared to other pulses)

- **Soil Types –** well-drained soils with neutral pH (6.5-7.5)

- **Temperature Range –** 5-32° C; prefers cooler weather

- **Day Length Sensitivity –** not a significant factor

- **Light –** full sun preferred

V. faba typically produces greater yields with narrow-row spacing (18-36 cm between rows), and 5-10 cm planting depths (larger seeded varieties of *V. faba* require deeper planting to prevent seeds drying out as they imbibe). Weed management is critical during establishment as *V. faba* is sensitive to weed pressure.

Harvesting and Seed Production

Harvesting should be timed to take place before pods are dry enough to shatter, resulting in seed loss in the field. Harvesting in the early morning, when ambient moisture is highest, may aid in reducing pod shattering. Pods should then be place under a covered structure and allowed to dry to completion, then shelled and stored appropriately. Immature beans can be consumed fresh as well and should be harvested accordingly.

Pests and Diseases

V. faba is susceptible to various fungal diseases (chocolate spot, ascochyta blight, Fusarium wilt, and rust), viruses (yellow mosaic, bean leaf roll, broad bean stain virus), and nematode pests. Likewise, aphids, leaf weevil, pod borer, and leaf miners are common insect pests.

Cooking and Nutrition

V. faba beans are covered in a thick skin. This is often easily separated after boiling in water. Large bean varieties require long cooking times. *V. faba* contains many of the same anti-nutritional factors that other pulses do, but in particular can cause favism, a hemolytic condition, in those with genetic

predisposition.

References

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