

STAGING GUIDE

Faba Bean

Faba beans germinate with the cotyledon remaining below ground (hypogeal germination). The epicotyl (part of the stem above cotyledons) grows toward soil surface and pushes the main shoot (plumule) above ground. As the shoot grows towards the soil surface and emerges, growing points (nodes) become evident. The first two nodes with faba beans develop below or at soil surface and the small leaves associated at these nodes are called scale leaves. Regrowth is possible from buds at the base of these scale leaves.

Faba bean has a thick, firm stem with compound leaves that are much larger than other pulses such as chickpeas, lentils, and peas. The leaves can be up to eight centimetres in length and consist of two to six leaflets in a pinnate arrangement. The first true leaf is produced at the third node position. The first two leaves consist of two leaflets each and remaining leaves consist of three or more leaflets. Growth is rapid during vegetative stages and faba bean seedlings can produce new nodes every five days.

Staging at the Vegetative Stage

When staging at the vegetative stage, some guides refer to true leaf stage, node stage, or above-ground node stage. When considering pesticide applications, make sure you know which stage the products are referring to. In the Faba Bean Growth Stages Diagram, the two leaf stage can be considered equivalent to the third above-ground node stage, as one of the lower nodes (scale leaves) is above-ground.

Staging can be difficult and sometimes the true leaves or scale leaves have been removed due to environmental damage, insect pressure, or for some other reason.

When determining crop stage, include nodes where the leaves or pairs of leaves are fully opened or unfolded. Youngest or newly emerging leaves are not included in staging unless completely open. Closely inspect the stem and identify potential growing points or nodes. Not only can regrowth occur from these locations but regrowth can also occur from the seed. In the case of regrowth, expect delays in maturity.



Faba bean seedling at 4 node stage (2 leaf stage) with third leaf still folded.



Faba bean seedlings emerging from soil with first true leaves still folded.

FABA BEAN GROWTH STAGES DIAGRAM

