# Soybean

# Growers Brief

## **Benefits of Growing Soybeans**

- Soybeans require fewer inputs than other crops such as nitrogen fertilizer, insecticides, desiccants, and fungicides. They also fix nitrogen which benefits the following crop.
- Diversifies rotation which allows opportunity to break the cycle of diseases, insects and weeds, and gives you more avenues of crop protection.
- Our growers are supported with industry leading agronomy; providing experienced, knowledgeable and timely advice.
- Spread work load, later planting and harvesting than other crops.

#### Establishment

The goal of seedbed preparation is optimize germination by improving soil to seed contact. A loose, uniform seedbed will ultimately create the best seed to soil contact, uniform emergence and aid in the uniformity of the sowing depth of the beans. Seed should be planted at a soil depth of 3 to 5 cm, but no more than 5cm as soybeans are more sensitive to seeding depth and will reduce seedling population.

Soil temperature is critical, soybeans require a warmer soil (12<sup>c</sup>) to germinate than compared to maize (10<sup>c</sup>). Row width plays an important role in weed control, plant health and standability, and yield. Spacing between the rows can range from 20 to 50cm. A population of 500-600,000 plants/ha is generally recommended.

As a pre-emerge ideally incorporated 2L/ha Trifluralin (Treflan) pre-plant and apply 750ml/ha Sencor post planting within 2-3 days. Also include insecticide 40mls of Karate with pre-emerge.

### Fertiliser

Soil testing prior to planting will help determine nutrient levels in the soil before Planting. Phosphorus & Nitrogen are important at establishment. Soybeans have a large requirement for nitrogen, but can obtain the majority of this from the air via Rhizobium bacteria forming nodules on their root system. Nitrogen fixation can supply up to 75% of the crops N requirements (usually 50-70%). A Small amount of starter nitrogen maybe require as it takes 3-4 weeks for the nodules become functional. Under poor conditions can extend this period. General Crop requirement: is 24-40P, 15-20S and 25-30N in the seedbed. K depending on soil test.

#### Post Emergence

Grasses and broadleaf weeds can be controlled post-emergence, preferably as early as possible to limit any opportunities to compete with the young soybean crop. The window to control broadleaf weeds is very small and best results are obtained on weeds less than four leaf stage. For broadleaf weeds apply Bentazone in warm conditions for best results. Grass weeds can be controlled using Clethodim.

Soybeans generally don't suffer from pest or diseases, but sclerotinia can be a problem in some areas and under poor conditions. Modern varieties are much less susceptible to sclerotinia, but we recommend growers apply Amistar (Azoxystrobin)

#### Irrigation

The key period for irrigation is during flowering and pod filling. Moisture stress over this period can reduce yields. Mild moisture stress in the early vegetative stage has little impact on grain yield and can encourage the plant to seek moisture.

#### **H**arvest

Soybeans are generally harvested later than other crops which helps spread out the farm workload. Soybeans can sit in the paddock and usually do not lose quality in poor weather. However, soybeans also dry down much quicker than other crops once they have matured. Often farmers can often start harvesting their soybeans quicker than other crops. Soybeans are a great harvest management tool.



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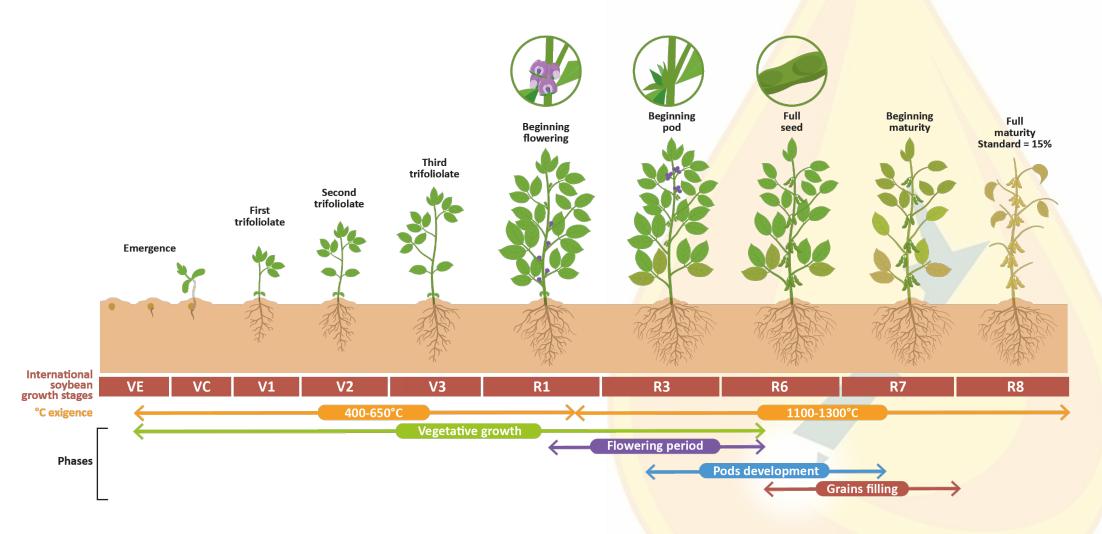


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