Sunflowers

Growers Brief

Benefits of Growing Sunflowers

Expert agronomy: Experienced, knowledgeable, on-farm support
High yielding varieties: Top preforming overseas genetics.
Improves soil: Sunflowers aggressive root system breaks up soil & promotes beneficial bacteria, fungi and microbes in the soil.
Diversify crop rotation: Decrease pest, weed & disease pressure.
Low inputs: Low nutrient demand and chemical inputs.

Establishment

The potential yield of a Sunflower crop is highly influenced in the early stages of the crop. Good soil preparation, seed placement & close monitoring for pests at crop emergence is essential.

Ideally aim to create a firm stale seed bed by preparing ground early. This allows weeds to strike, increases soil temperature & conserves moisture. Many growers are also using strip-till systems which has added benefits over full cultivation.

Using a precision drill to establish sunflowers is the optimum method of giving the crop the ideal foundation. It ensures seeds are planted at the correct depth and at precise, even spacing. This gives equal amount of space, allows for even seedling emergence and early growth. Then as the plants grow, each plant will have space ensuring its leaves can intercept sunlight, further helping to maximise yield.

Seedling emergence is the most critical stage. Protecting seedlings from pests such as birds, slugs and cutworm is paramount as crop is very vulnerable at cotyledon stage. Daily inspections over the first 10-14 days and proactive measures, with applications of insecticides, slug bait and bird deterrents will ensure strong establishment.

Pre-emerge herbicide application is important, as it can be difficult to kill some broadleaf weeds post-emerge. Apply 2L/ha Trifluralin (Treflan) incorporated followed by 3-4L/ha Pendimethalin (Stomp) applied post planting.

Fertiliser

Depending on soil fertility, drill with either 150-200kg/ha Yara ActyvaS or Crop 15. Sunflowers are not big users of N but do like good levels of K and pH 6.0-6.2. Total fertiliser requirement: 60-80N, 40-60K & 20-30P. Boron is also very important for plant development. For more a specific fertiliser plan a current soil test would help.

Post Emergence

Ideally we're aiming for strong plant establishment which leads to rapid early growth. Sunflowers are naturally fast growing plants, enabling them to outcompete most weeds. Grass weeds can be controlled post emergence with Clethodim

Sclerotinia is the main disease risks to the crop. This is amplified by wet damp weather or over watering. The hybrid varieties we grow are bred to have a high tolerance to Sclerotinia. However a fungicide application along with some micronutrient sprayed around stem extension would be beneficial.

Sunflowers have deep aggressive roots and are reasonably water efficient. In some areas the crop can benefit from irrigation to reach its potential.

Harvest

Once seed moisture drops below 35% and the crop is physically mature, the crop is ready for Desiccation. 3-4L of Diquat applied aerial will speed up the ripening process and get the crop into store faster. Once seed drops below 15-20% moisture harvest can begin and will require drying down to 9%.

Convectional header fronts can be used but the addition of harvest attachments will reduce harvest loses. Pure Oil NZ have several sets of attachments which are available for use.

Sunflower seeds needs to be dried down immediately after Harvest. Seed is not safe until moisture falls below 9% and can heat very quickly within a few hours at moisture above 12%.

Post harvest plan is critical to ensure seed quality. This plan will need to be discussed with Pure Oil Rep prior to harvest.

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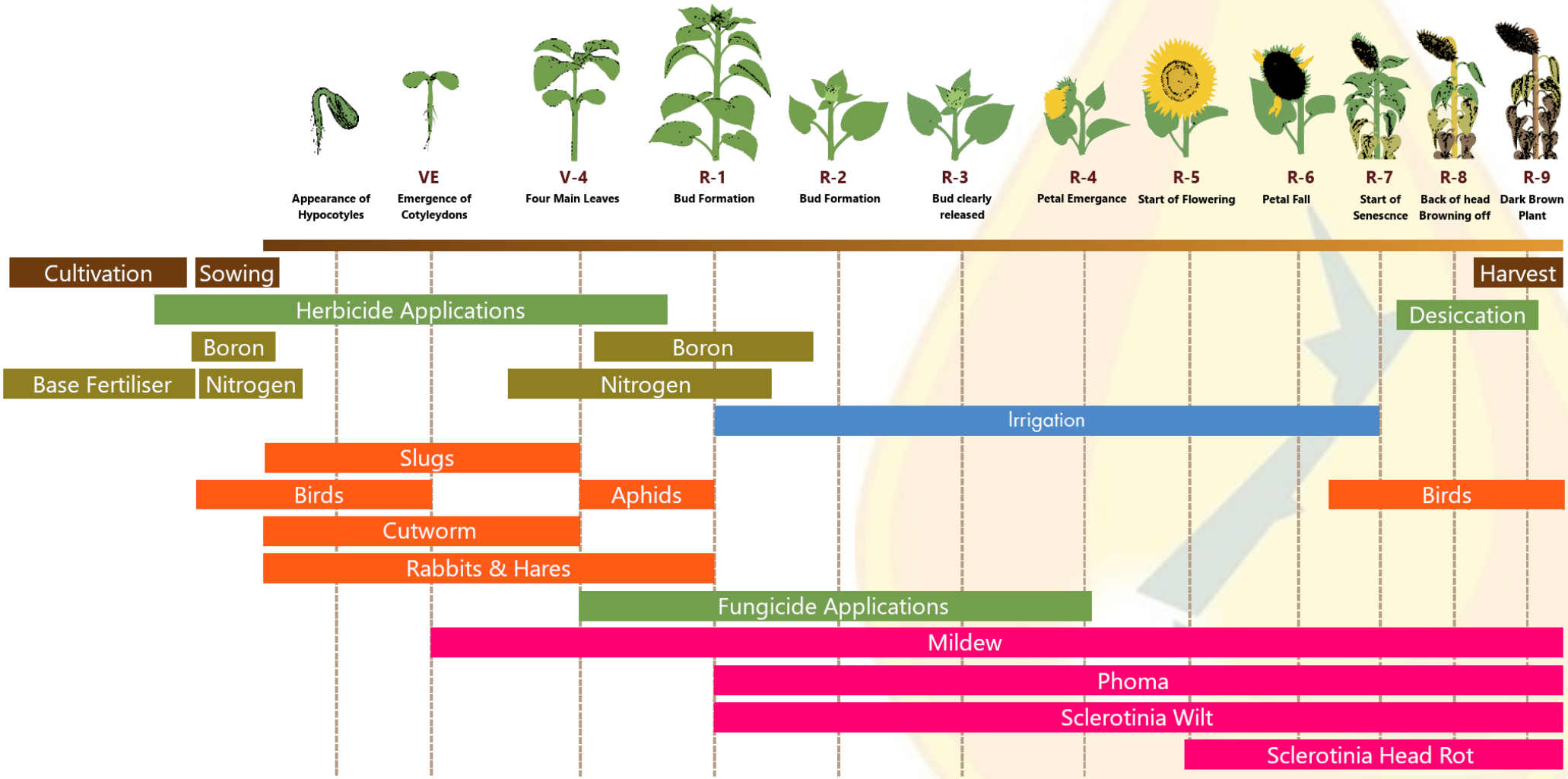
Sunflower Crop Management

Growth Stages:	Germination	Vegetative	Bud Formation	Flowering	Maturity



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