

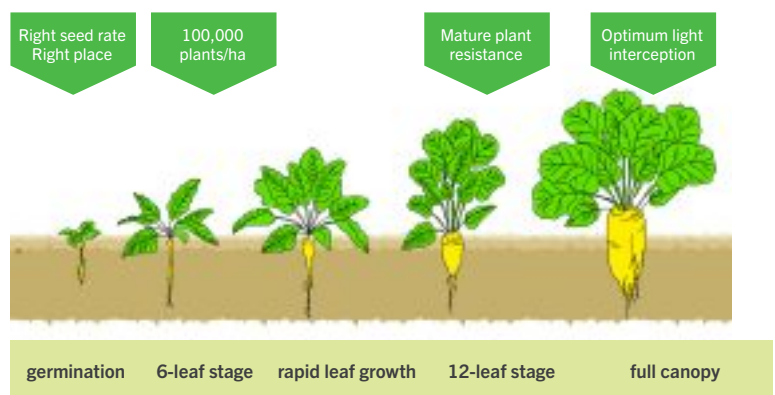
# Establishment

## Rapid canopy development

### Key Points:

- ▶ Once the crop has established, rapid canopy growth is vital for reaching key growth stages as quickly as possible
- ▶ At the 12-leaf stage plants become more resistant to virus
- ▶ At the full canopy stage light interception is optimised

### Targeting key sugar beet growth stages

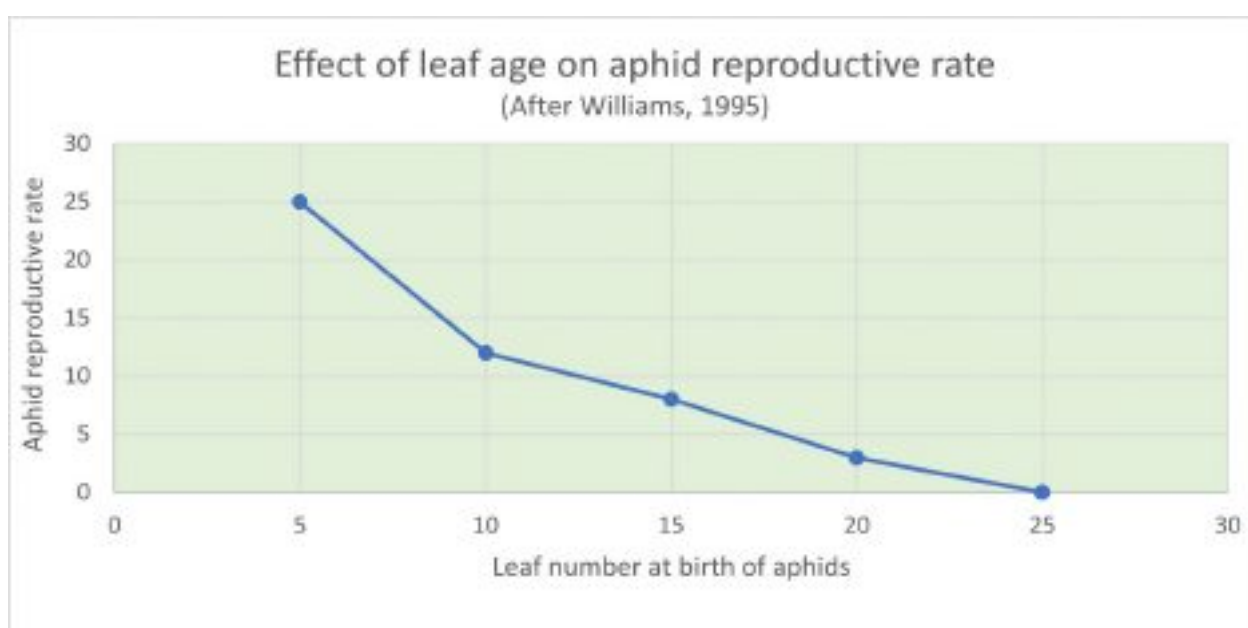


### Optimum light interception by the crop canopy

The target date for this is the spring solstice, third week of June, when the sun is at its highest and solar radiation is at a maximum. The target is to have a Leaf Area Index of 3 which equates to >90% ground cover by this date.

## Mature plant resistance

Changes associated with the development and maturity of leaves, result in fewer aphids being able to feed and reproduce successfully. These changes occur around the 12-leaf stage of development. On crops drilled in the middle of March this will usually be around the middle of June. The secondary spread of virus, and therefore the impact on yield has been shown to be much reduced on crops that have reached this crop growth stage.



## Rapid canopy development - Check list

To ensure crops develop canopies as quickly as possible, pay attention to the detail on ALL of the following points:

- Good seedbed conditions for rapid seedling establishment and development
- Good underlying soil structure below the seedbed. Sustained plant growth requires both adequate drainage in wet conditions and good moisture retention in dry conditions
- Avoid soil compaction
- Ensure sufficient nitrogen is applied early enough to drive leaf growth and canopy expansion
- Avoid herbicide damage as this will, depending on the severity, significantly delay canopy growth
- Ensure any micronutrient deficiencies such as manganese are identified and treated with foliar applications at an early stage