

Successful brassica establishment

Planning

Planning is the key to success. The planning check-list should include the following;

Paddock selection

Questions to ask when selecting paddocks;

- Which paddocks have poor performing pasture, have undesirable species, low legume content?
- Has fertility status been limiting pasture production? Will this need addressing to ensure a good brassica crop and a successful renovation phase?
- Is the paddock selected in close proximity to a run-off paddock, supplementary feed source, water supply?
- How easily will the paddock be subdivided?
- Is the right farm equipment available for successful subdivision of paddock, water supply requirements etc?
- What is the proposed crop sequence for this paddock?
- Do any other issues need addressing prior to a permanent sow-down, e.g. elimination of volunteer ryegrass before AR1 endophyte ryegrass establishment?

Pre sowing preparation

- A soil analysis should be done to assist in applying the correct lime or fertiliser requirements prior to sowing.
- Successful weed control starts with careful identification of species (e.g. Bentgrass), growth stage and vigour. This will determine herbicide selection. Seek advice from a technical representative for specific recommendations.
- Spray paddock using a knockdown herbicide, e.g. Glyphosate or equivalent. Cultivate paddock only after total kill is achieved.
- Cultivate to a fine, firm seedbed, allowing the small seed to be planted at an even 1-2cm depth.
- Roll paddock to achieve good seed to soil contact for even germination.

Your regional PGG Seeds distributor, local seed retailer or agronomist will be able to provide specific advice based on your particular farm environment and seasonal feed requirements.



Planting

Conventional cultivation

Conventional cultivation is generally the most reliable way of eliminating weeds and establishing brassicas. Best practice is the broadcasting of fertiliser prior to planting. For a minimal pass operation pull hoses out of coulters and drop fertiliser in a surface band, with incorporation by light harrowing and rolling.



Direct drilling

Direct drilling with modern drilling equipment is suitable if spray control of weeds is successful and fertiliser applications are considered carefully. For detailed information on no-tillage and direct drilling refer to "Successful No-Tillage in Crop and Pasture Establishment", Ritchie et al, 2000. Nitrogen applications are a key component of successful establishment from direct drilling. Under no-tillage regimes crop residues are broken down by microbial activity (not burning, oxidation or mineralisation as in tillage systems) that temporarily locks up nitrogen. Therefore N will not be available at the time of the brassica establishment, and hence this delay in N availability needs to be compensated for at sowing time.



Sowing rates and timing

Refer to individual species for specific sowing information.



Sowing depth

Brassicas have a small seed, thus sowing depth can play a critical part in crop establishment. A **maximum** sowing depth of 2cm is recommended for all brassica species. Having a fine, firm, even and moist seedbed will allow greater control of sowing depth and subsequent successful establishment.



Seed treatments

Best practice establishment techniques will include the use of a commercial seed treatment for seedling protection. Seed treatments available include insecticides for plant protection at establishment, and fungicides for seedling diseases. Broadcast and direct drilled crops may be more susceptible to seed theft by birds and may require a bird repellent. Contact your local seed retailer or technical representative for further advice.

