

Swede advisory update #12

24 September 2015

Preparing for Winter/Spring 2016

Preparation for winter and spring 2016 begins now with planning your winter feed budget and determining what your wintering system will look like. This is critical this year as some farmers look to winter more stock themselves.

Wintering in the Southland/South Otago region, where pasture growth rates are low most years from May until August, creates challenges for feeding dairy cows. Forage crops (brassica and fodder beet), which provide high yielding high quality feed that can be grazed, are essential feed sources in winter and as a supplement to pasture in early lactation and are critical for the success of dairying in the southern South Island.

There are many crop choices available, with each crop having its own merits. Brassicas, fodder beet and cereals are the main crops suitable for winter grazing, and there are several options within these groups. Conserved feeds such as silage, hay and baleage are also required to complement these crops.

DairyNZ recommends that you:

- Seek expert advice from your seed technical field rep, seed company or farm consultant when finalising your crop selection options to ensure the chosen feeds will achieve your wintering goals.
- Ensure you have plenty of supplementary feed (silage, baleage, straw, hay) to offer with all crops.
- Simplify your winter feeding system. Some diversity with crops is good to minimise the impact of a specific crop failure but minimise the number of different crops you grow to simplify your transitioning processes and winter feed allocation. Cows should be transitioned onto crops and between crop types and varieties. So the fewer crop types (e.g. kale vs swede) and varieties (e.g. Triumph vs Domain) of the same crop in your system the less transitioning required.
- Grow the same crop and variety on the milking platform that the cows will be offered during the winter (on support block, at grazer) to simplify transitioning and minimise risk. The exception is HT swede which should not be grown on the milking platform to be fed late winter/early spring.
- Work out the mobs that will be wintered and as far as possible match your paddock sizes and your crop type to the herd sizes so cows don't need to change crop type during the winter.
- Seek expert advice regarding the best way to manage and feed cows over winter if you are unsure.
- Consider how you will set up your wintering mobs with regards body condition score (BCS) and calving date. Ideally, initially setting up mobs based on BCS, to allow differential feeding of groups, then re-sorting into calving mobs later in the winter will provide the best opportunity to achieve BCS targets without excess feed input. If you can't change cows between mobs during winter, planning your autumn feeding, milking frequency and drying off strategy to minimise the BCS range at dry off is recommended.

- Consider the safest way to offer the crop if you choose to mix different crops in the same paddock (e.g. swedes and kale, turnips and moata). Sowing mixed seed rather than strip sowing individual crops reduces the risk of cows selecting a particular crop and eating only that type.
- Avoid planting different crops at alternate ends (or opposite sides) of the same paddock or allowing animals free access to different crop types on the same day (e.g. fodder beet & kale) to ensure all cows are eating a balanced diet.
- Select paddocks that will more easily enable cows to graze long narrow faces of crop.
- Consider the risks involved with each crop and the options for minimizing these risks, which includes having additional supplement available to increase the supplement to crop ratio if required to mitigate nutritional issues that may arise.
- Have 7-10 days of maintenance supplementary feed (70-100 kg DM/cow) available, in addition to your feed budget requirements, as part of your winter feeding programme. Even though times are tight financially having this feed for when unplanned events occur (snow, southerly storms, crop nutrition issues) will give you the space to plan and seek additional inputs if required.
- Speak with your grazier(s) about how they will be managing your cows, keeping in mind these recommendations.

A healthy well grown crop is a good investment.

Regardless of where crops are grown, it is critical to grow them well. For the same level of inputs, dry matter yield can vary significantly. A well-managed crop can produce double the yield of a poorly grown crop and requires only half the land area. In addition, healthy well grown crops provide the best nutritional value for animals. Anti-nutritional factors increase if the crop is under stress (lack of water, the presence of weeds, pests, plant disease, or poor soil fertility). Anti-nutritional factors include nitrates, glucosinolates and SMCO. DairyNZ recommends that you consult with your seed supplier, seed company or consultant for the right agronomy advice for your crop. For more information on plant options as well as factors to consider and to discuss with your expert seed adviser to get relevant crop information (see Swede advisory #3 dairynz.co.nz/swedes).

Revise your feed budget often

It is important to review and revise your feed budget regularly during the season. We recommend that crop yields be completed at strategic intervals so that you can make adjustments to the plan and seek additional feed sources if required. We suggest:

February/March: assess how well the crop establishment and growth has gone, what the feed situation is like on the milking platform and how herd BCS is tracking. If things are off track at this point you still have time to make some changes.

May: finalise the winter feed budget and allocate mobs to crops

Mid July: revise your late winter/spring feed budget. Late crops may be carrying extra DM as a result of growth during winter and the areas remaining may differ from your plan depending on winter grazing conditions.

Swedes

All swedes contain glucosinolates (GSLs) and it is generally accepted that swede leaves have higher levels of GSL's than swede bulbs. New leaf growth in all swedes may also have higher total GSL's than old leaves. The amount of total GSL consumed in the diet will impact on intake and growth rates of stock and determine the risk of toxic effects resulting in ill-health and potentially animal deaths.

The higher the proportion of swedes in the diet, the higher the risk of GSLs being consumed and the greater the risk of ill-health and potentially animals deaths.

It is therefore important to adopt management practices that minimise the risks, such as:

- Good transitioning onto the crop in early winter and between paddocks during winter (see DairyNZ Farmfact 1-75 Feeding winter brassica crops to dairy cows, dairynz.co.nz/publications/farmfacts/farm-management). Appropriate transitioning will minimise the risk of nutritional disorders from changes in the type of feed being offered and also any anti-nutritional factors that may be present.

- Applying caution when starting to feed all swedes in autumn as swedes that have not been frosted are likely to have lush, strong leaf growth which could be high in anti-nutritional factors. Also as the bulbs are still hard and difficult for cows to eat they may prefer grazing leaves.
- Offering more supplement during transition if cows are slow to start eating the bulbs, rather than increasing the crop allocation to fill the gap, as offering more crop will just increase leaf intake.
- Always feed supplement (silage, baleage, hay, straw) before feeding crop so that cows are not hungry when they graze the crop.
- Feeding practices that encourage the consumption of both leaf and bulb by grazing long narrow faces.
- Visually assessing the crop for bolting stems, new leaves and reproductive development throughout the winter feeding period. If crops start to change during winter/early spring farmers should exercise caution and remain vigilant.
- Not feeding any swedes with elongated stems and reproductive tissue (“bolted” swedes).

It is also generally accepted that because crops are selected for various traits, such as DM yield and quality, the composition of individual glucosinolates in the swedes and the swede components vary.

HT Swedes

DairyNZ recommends that farmers

- Use HT-swedes strategically and follow the advice of PGG Wrightson Seeds not to feed HT swedes to pregnant or lactating cattle, if you choose to include HT-swedes in your winter feeding programme for 2016, or in future years. Survey results indicate the risk of ill health with HT swedes is higher late in the season when crops are more mature and cows are in late pregnancy or early lactation.
- Do not feed HT swedes to cattle in spring when warmer temperatures increase the risk of swedes ‘bolting’ (elongated stems, new leaves, seedheads, and flowers) which have higher concentrations of GSLs, the naturally occurring compounds in brassicas that have been linked to ill-health and animal deaths.
- Do not feed any “bolted swedes” from any swede variety. Consequently farmers can ill afford a lost crop due to an early spring or “bolted swedes”.

DairyNZ also draws your attention to PGG Wrightson Seeds endorsements and advice if you are considering HT swedes as part of your winter programme.

“PGG Wrightson Seeds recommends the prudent approach is that HT Swede (HT-S57) should not be grazed by pregnant or lactating dairy cows. This recommendation will be reviewed as more information becomes available from the scientific research being undertaken”.

Prepared in consultation with the Southland Swede Working Group: Beef+Lamb, DairyNZ, Federated Farmers, PGG Wrightson Seeds, Ministry for Primary Industries, Rural Support Trust, New Zealand Veterinary Association and local veterinarians.



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