

ORGANIC GRASSLAND MANAGEMENT

Mary Lynch

Organic Farming Adviser

Grassland Management

- Clover is the key to organic grassland management
- Clover has the ability to take the nitrogen out of the air and make it available for grass growth.
- There are two types of clover used in Ireland – White clover and Red Clover.



White clover



White Clover

- White clover is normally used in grazing and cutting swards
- Can fix up to 80 – 120 kgN/ha/year.
- (same as 2 bags 18:6:12/ ac.- for free)
- Ability to reach herbage production of 80-85% of that receiving max. N in conventional systems
- Good digestibility throughout the growing season.
- Animals will intake large amounts of grass/clover

White clover

- Needs good pH in the soil – 6.3+
- Good phosphate and potash levels in the soil.
- Rotational grazing suits best
- Needs to be grazed off well going into the winter, to allow light down into the sward
- Does not like poaching.
- Poor spring growth

Growth curve-Teagasc Solohead

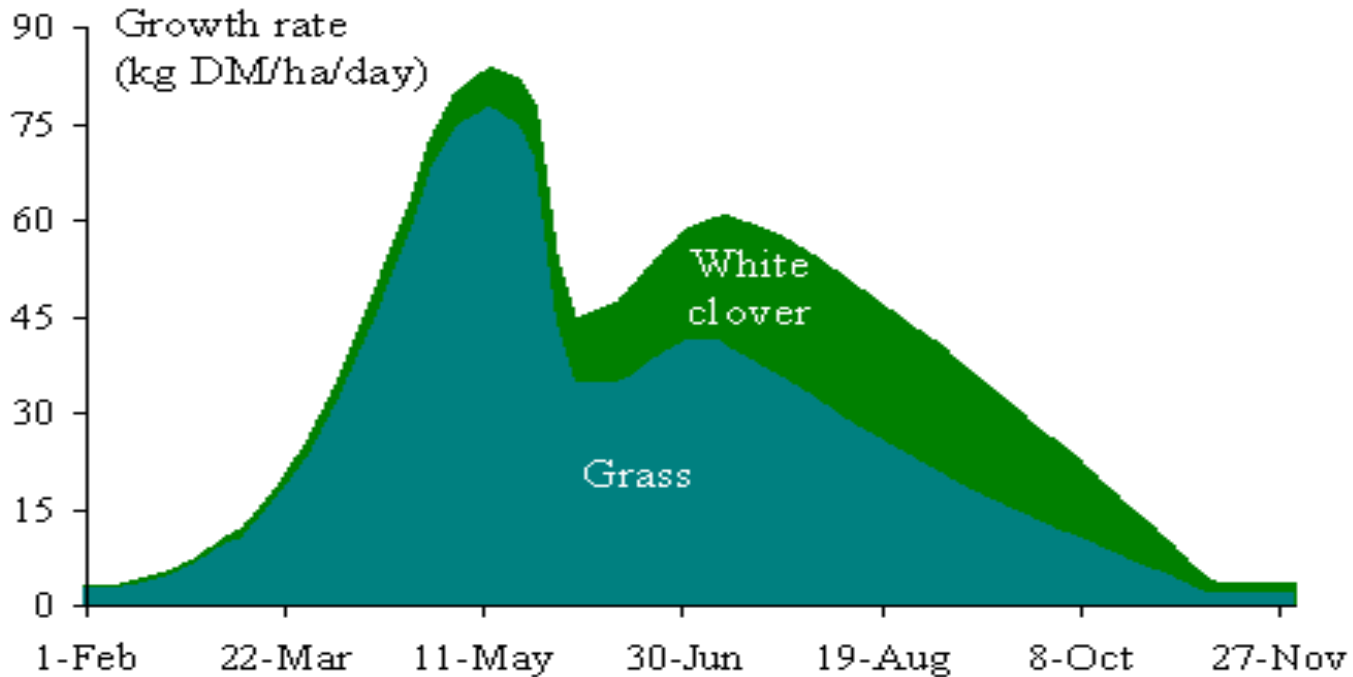


Figure 3. Changes in the grass and white clover content of swards during the year

The importance of clover

- Extends grazing season ~ 1 month
- Higher Stocking Rates
- Provides free Nitrogen
- Higher intakes by animals
- Higher mineral content
- Maintains digestibility all season
- Greater biological diversity



White clover silage

- Normally made from mid-June onwards
- Ideally, sward should be wilted for at least 24 hours.
- Clover can be broadcast into the sward after it is cut for silage to improve the amount of clover in the sward.
- Need good moisture levels in the soil and rain within one week of sowing.

Increasing white clover

- Full reseed
- Undersown to arable silage crop(esp. for fields with high weed pressure)
- Broadcast after silage or hay
- Manage sward to encourage clover
 - No artificial nitrogen
 - Tight grazing in early spring
 - Rotational grazing
 - No poaching
 - Lime

Full Reseed

- Try not to plough too deep
- Can be done up to mid- August
- Seed mix to contain mainly diploid late PRG with some tetraploid -20-22kg/ha
- Blend of medium and large leaf white clovers- 2.5-5 kg/ha (depending on previous crop)
- Don't sown clover seed too deep

Undersow to arable silage

- Useful for spring reseeds
- Good for high weed pressures
- Allows silage to be cut off sward after 8-10 weeks- no loss of production
- Higher cost

Oversowing

- Oversowing clover into existing sward
- Existing sward must be bare-ideal after silage or hay
- Sow at 5k/ha clover seed
- Need good conditions at sowing
- Need moisture within 1 week of sowing
- Variable results depending on weather &/or soil conditions







Field oversown with clover



Sward maintenance

- Topping essential for good weed control
- Tight rotational grazing best.
- Approx. 30 days between grazings.
- Keep ph over 6.3 – lime regularly
- Keep phosphate level over 3.
- No poaching

Three key points on grassland management for clover

1. Apply slurry in spring – no more after mid April

2. Tight grazing is important

4 cm between turnout and mid April

5 cm during main grazing season

4 cm before closing up for the winter

Build covers during autumn – but graze out well before winter

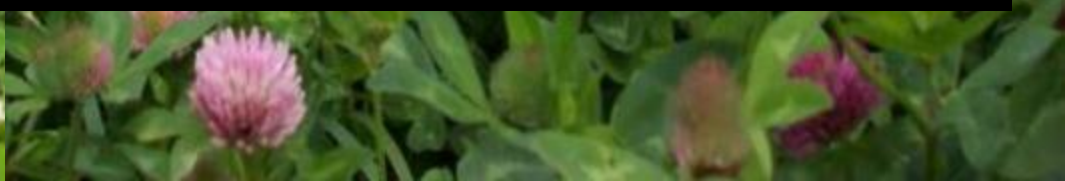
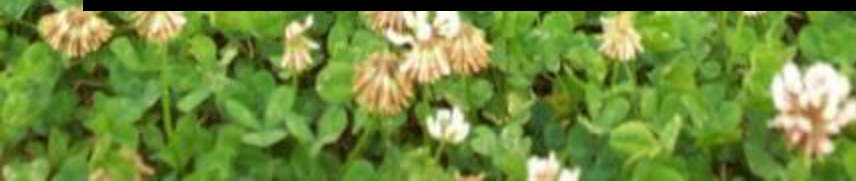
3. Control dock populations



WHITE CLOVER



RED CLOVER



Red Clover

- Use for silage production
- Can produce up to 200kgN/ha/year
- Yield up to 15,000 kg DM/ha
- Needs a 48 hour wilt if possible.
- Can be cut up to 3 times per year.
- Must be reseeded every 3-4 years- suits where also arable system
- Cannot return to same field for 6 years
- Needs good tillable land.

Further reading

- Teagasc website- Grassland management on organic farms
- A guide to management of white clover grassland
- Grassland Management for Organic Farmers- David Younie