

# ORGANIC GRASSLAND MANAGEMENT

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# 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

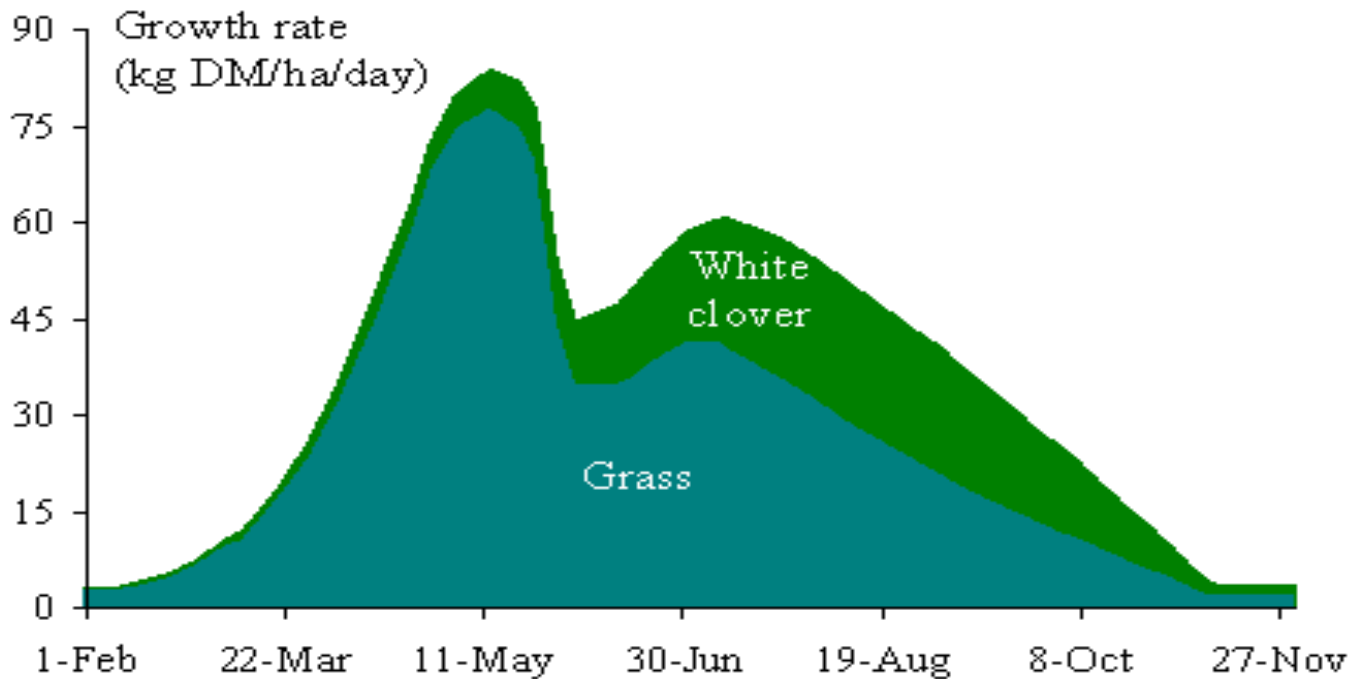


Figure 3. Changes in the grass and white clover content of swards during the year

# 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

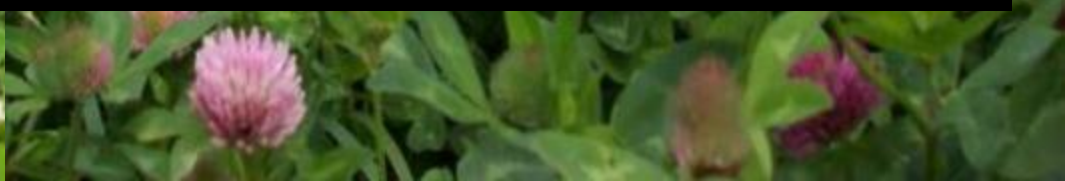
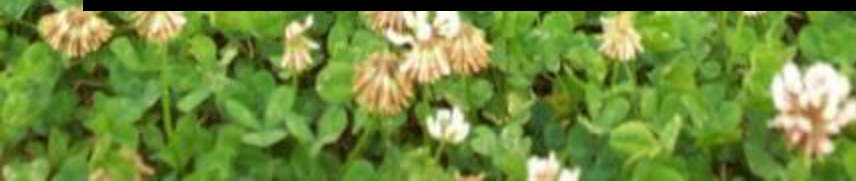
3. Control dock populations



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