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# Forage brassica options in Tasmania

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#### Introduction

- Forage brassicas in Tasmania: An overview
- Brassica variety options
- Crop production strategies
- Getting grazing management right
- What's new for the future





## Why grow forage brassicas?

- Its cheap feed c/kg dry matter (DM)
- It's a high-quality feed
- It has a high water use efficiency (WUE) rate
- It's a great break crop to use when renovating pasture.

Ultimately growing forage brassicas can be highly productive and profitable.





























# Brassica options for Tasmania

Туре	Varieties	Sowing kg/ha (drilled)	Weeks to 1st grazing	Notes	Multi-graze	Earliest sowing	Latest sowing
Leafy turnip	Hunter	3–6	h_X	Fastest crop available. Multi-graze is possible if managed well.	Yes	Sep	Mar
	Pasja Winfred						
Rape	Greenland	3–6	12–14	Best to wait until crops reach full maturity before grazing. Will not satisfactorily re-grow unless grazed between 65–80% of cover each time.	Yes if grazing management is correct.	Mid October	Mar
	Goliath						
	Titan						
	Interval						
	Rangi						
Turnip	Barkant	1.5–3	12–14	Tankard-style stubble turnips. High yielding, quick to graze.		Mid October	Mar
	Marco						
	Rival				No		
	Dynamo			Globe type			
	G2	1.25-2.5		In-ground storage possible			
	Green Globe						
Swede	Invitation	1	16–20	High dry matter. Excellent winter	No	Nov	Jan
	Dominion	1	16–20	grazing crop.			
Kale	Sovereign	3	14–16	High-quality autumn/winter	No	Nov	Jan
	Caledonian	3	14–16				
	Regal	3	14–16	grazing option.			
	Gruner	3	14–16				





## Crop production strategies

#### Forage brassica yieldlimiting factors:

- available water
- usable heat
- nutrition
- genetics
- pests and disease







## Soil preparation and sowing technology

- Burn off: including insecticide
- Fallow (if possible)
- Soil preparation:
  - will vary depending on circumstances
  - disc
  - plough
  - one-pass sowing common.
- Sowing:
  - air seeder/power harrow combination
  - little to no crops broadcasted anymore
  - precision is desired.







## Sowing examples











# Sowing examples









## Nutrient requirements

- One of the major limiting factors we have direct control over.
- Soil test, don't guess. Monitor to manage. Be fert smart.
- Approximate inputs for 10 and 15t/DM/ha yields:

Viold					
Yield (t DM/ha)	N	Р	К	S	+ Trace elements
10	250	30	150	55	B + Mo
15	375	45	225	85	







#### Monitor emergence closely

- Cutworm, redlegged earth mite (RLEM), lucerne flea, Argentine stem weevil (adult and larvae), ducks, geese, wallaby, deer, etc.











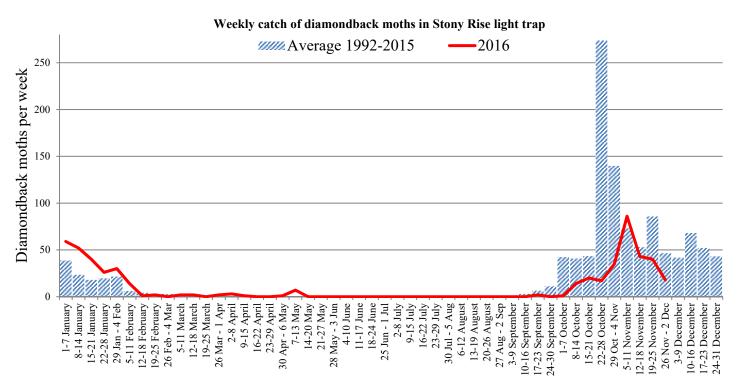
- Weeds: we do have options available e.g. ForageMax herbicide in turnips and forage rape (not in kale or swede).











Source: Mr Lionel Hill - Principal Entomologist, Plant Biosecurity & Diagnostics Branch Department of Primary Industries, Parks, Water & Environment





Diamondback moth, cabbage white butterfly, heliothis, native budworm.

Early to mid season

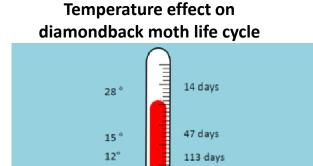
Chevron cutworm, cabbage white butterfly, looper, leaf miner.

Mid to late season

Average daily temperature











Life Cycle

## Grazing management

- Effective grazing management maximises yield, feed quality AND utilisation
  - Ensure crop has matured prior to grazing.
  - Ensure stock are up to date with their vaccines.
  - Introduce animals over a 7–10 day period.
  - Block or strip graze with portable electric fencing.
  - 'Back fence' multiple-graze crops.
  - Avoid introducing stock with empty stomachs onto forage brassica crops.
  - Ensure sufficient quality water is available to stock at all times.
  - Ensure animals have access to roughage, such as hay, or access to dry pasture.







## Top three take-home messages

1. Forage brassicas can be a cheap, high-quality feed source if planned and managed appropriately.

2. Be proactive in your management, not reactive.

3. Don't take shortcuts. If you're not sure, ask.





## Tools, resources and training

- Seed companies and service providers, such as Roberts Ltd, provide excellent and up-to-date information on these products and should provide good after-sales advice.
- Australian Bureau of Meteorology <u>www.bom.gov.au</u> (forecasting and historical data)
- www.dairyaustralia.com.au/Pastures-and-Feeding/Crops/Brassicas.aspx





#### Thank You

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