



# On-farm practicalities of Novacane<sup>®</sup> and Seedcane Production

**31 October 2023**

**KwaShukela, Mount Edgecombe**

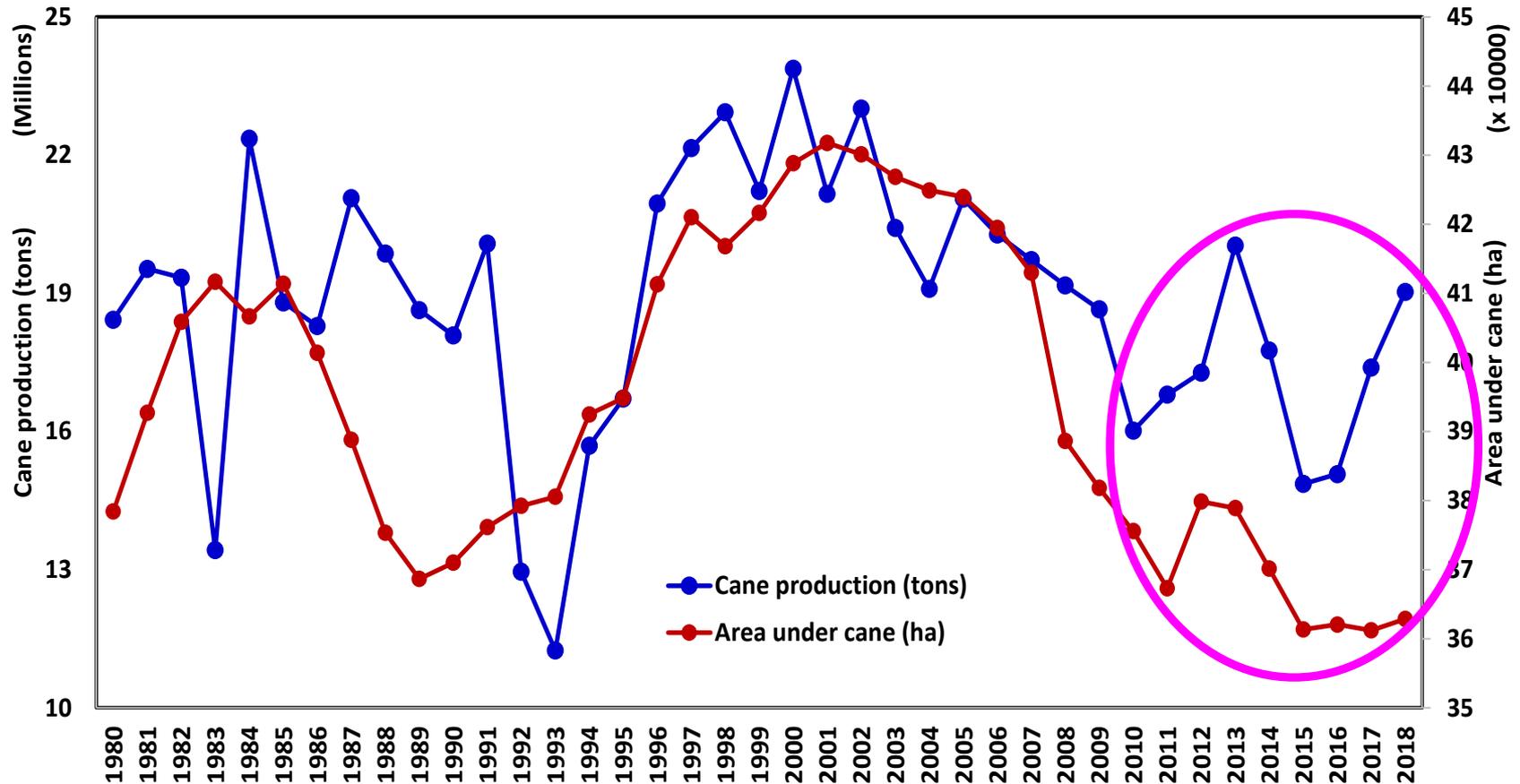
Dean Percival, Gingindlovu

# Seedcane should be:

- Disease free and true to type
- Ideally around 12 months old



# Cultivar genetic gains and cane production



**Grower testimony = higher cultivar yield maintained cane production after reduction in cane area from diversification**

# Certified Seedcane Process:

- Heat treating of seedcane from a recognized and previously certified source at 50 degrees for two hours



- Seed goes into a cooling tank of Bayleton (fungicide – pineapple sett rot)
- Seed then planted out into a well-fallowed and disease free field.

# Forward Planning



- P&D Officer goes around to growers and takes orders in June/July for the following year.
- Plan harvest of future seed beds early to allow for an early kill off and planting of a summer cover crop early, possibly a follow up winter cover crop ideally.
- Get rid of any volunteers as early as possible and keep checking.
- Do drainage early if need be.
- Try to match more similar varieties together and think long term. Not always easy with new varieties but SASRI can give advice. (Shorter cycle/longer cycle. Propensity to flower etc)

# Forward Planning

- Within your farm also try to plan where you plan to bulk out different varieties and plant seed accordingly.
- Give thought to order in which you will plant out the different varieties according to varietal characteristics, characteristics of seed beds and even possibly normal harvesting operations on farm. Rain is always a challenge at this time of year, good planning can sometimes make a big difference.



Photo: Unicab



## Heat-treating process

We made use of a “ John Upfold” 12 basket tank which hold 60-70 kg per basket.

Seed source must be from a certified source and checked by P&D team, cane knife hygiene always important whenever it comes to seed!!



Photos: Jack Govender



Photos: Jack Govender

# Heat-treating process



Slow laborious process, requires a reliable and trustworthy team with tank ideally situated in a visible and easily accessible place allowing one to pop in at regular intervals.

6 hours cooking at an average of 65kg basket gives one around 2,7 tons of seed cooked per day. Feed 1 basket every 10 minutes, so feed for 6 hours and then 2 staff stay on an extra 2 hours to take out last 12 baskets.



# Planting out of seed

- Plant seed out in usual fashion, no need for cutting billets shorter.
- Hygiene of “gejas/hoes” very important, generally such a small daily area being planted that easiest to just cover by hand.
- If possible move planting team from seed field to another plant commercial field close by to minimize loss in productivity.



# After planting

- Post-planting husbandry same as general cane but liaising with P&D team to carry out regular inspections as per legislation, 3 inspections between planting and harvesting.

- P&D teams check for:
- Diseases (incl RSD)
- Offtypes
- Eldana



# Novacane®

Plant out at 20k-22k seedlings per hectare

If at all possible use “softer” chemicals in those fields for a year or two prior to planting out of seedlings as residual chemical in soil can have a big negative effect on seedlings.

Choice of soil type, aspect etc can all help

Dispersal of fertilizer in soil

Lodging/tipping



# Novacane®

Watering and hand weeding very important  
Plant crop almost always very ropey



# Harvesting of Seed

Start harvesting seed beginning of September

Plan seed release schedule per variety and give growers at least 1 month's prior notice, invite growers to come and inspect seed prior to collection.

Co- operator cuts and loads – HYGIENE

Put strict rules and time parameters in place for collection

Weighbridge



# Future Challenges?



# Loadshedding!



11:35

41%



Gingindlovu (11)

Eskom Direct, uMlalazi,

Options

Friday, September 15

Total 9h30m



00:00 - 03:30 Stage 6 3h30m

07:00 - 09:30 Stage 5

15:00 - 17:30 Stage 5

23:00 - 00:00 Stage 5

Saturday, September 16

Total 9h30m



00:00 - 01:30 Stage 5

07:00 - 11:30 Stage 5 4h30m

15:00 - 17:30 Stage 5

23:00 - 00:00 Stage 5

# Future Challenges?

Loadshedding

Ageing HWT tanks

Confusion over who owns some of the tanks

Seedcane co-operators – as it is a lot of work, and can be frustrating



# Conclusion

- Onerous and frustrating job at times.
- Critical that it NEEDS to be done accurately and correctly for the benefit of the growers and industry at large
- Personal biggest benefit: good supply of seed for personal use and access to new varieties



**Thank you**

