# Pear production in South Africa: With special focus on Abate Fetel

Presented by : Christo Strydom

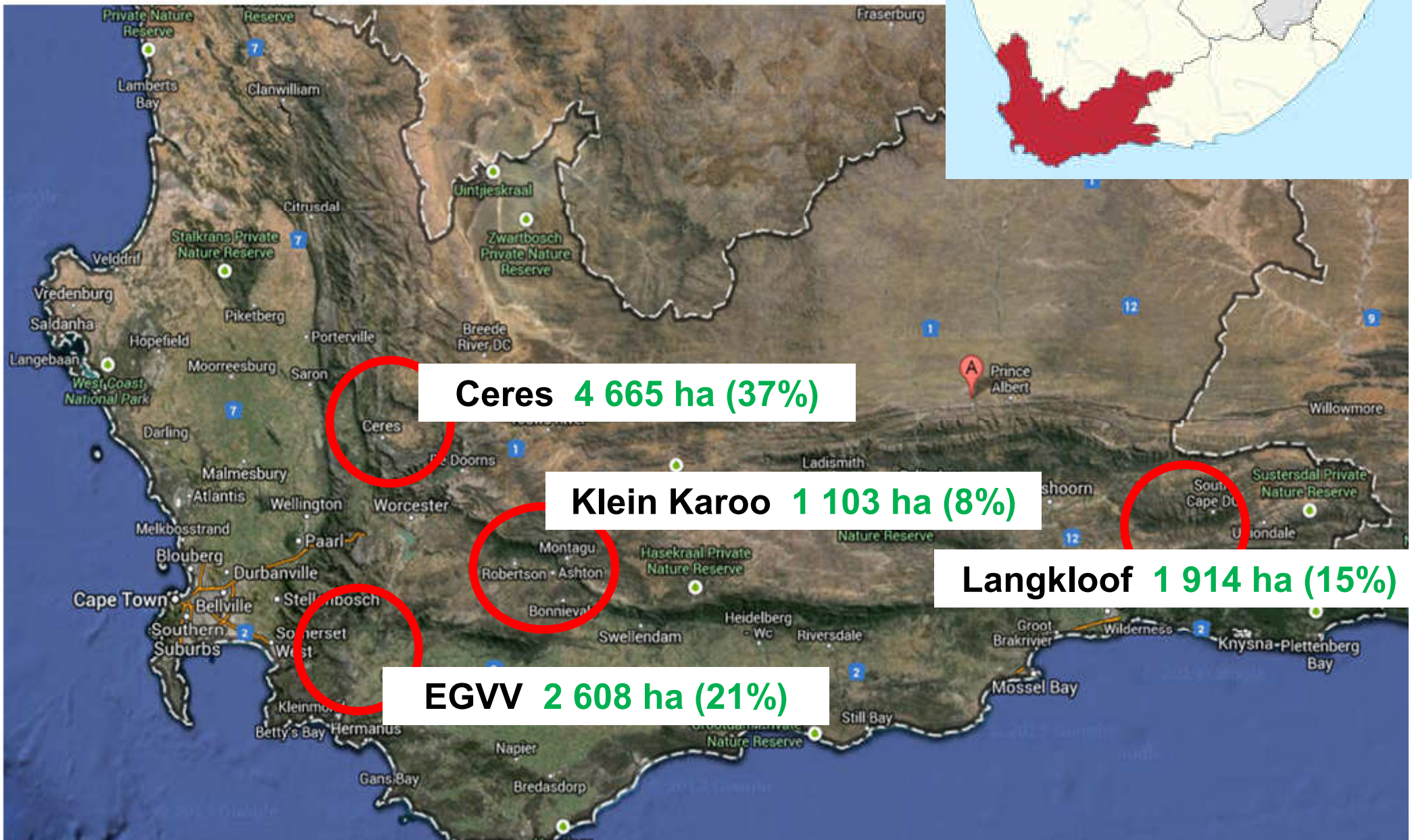
Wolseley Fruit Packers (Pty) Ltd

Wolseley, Western Cape, South Africa

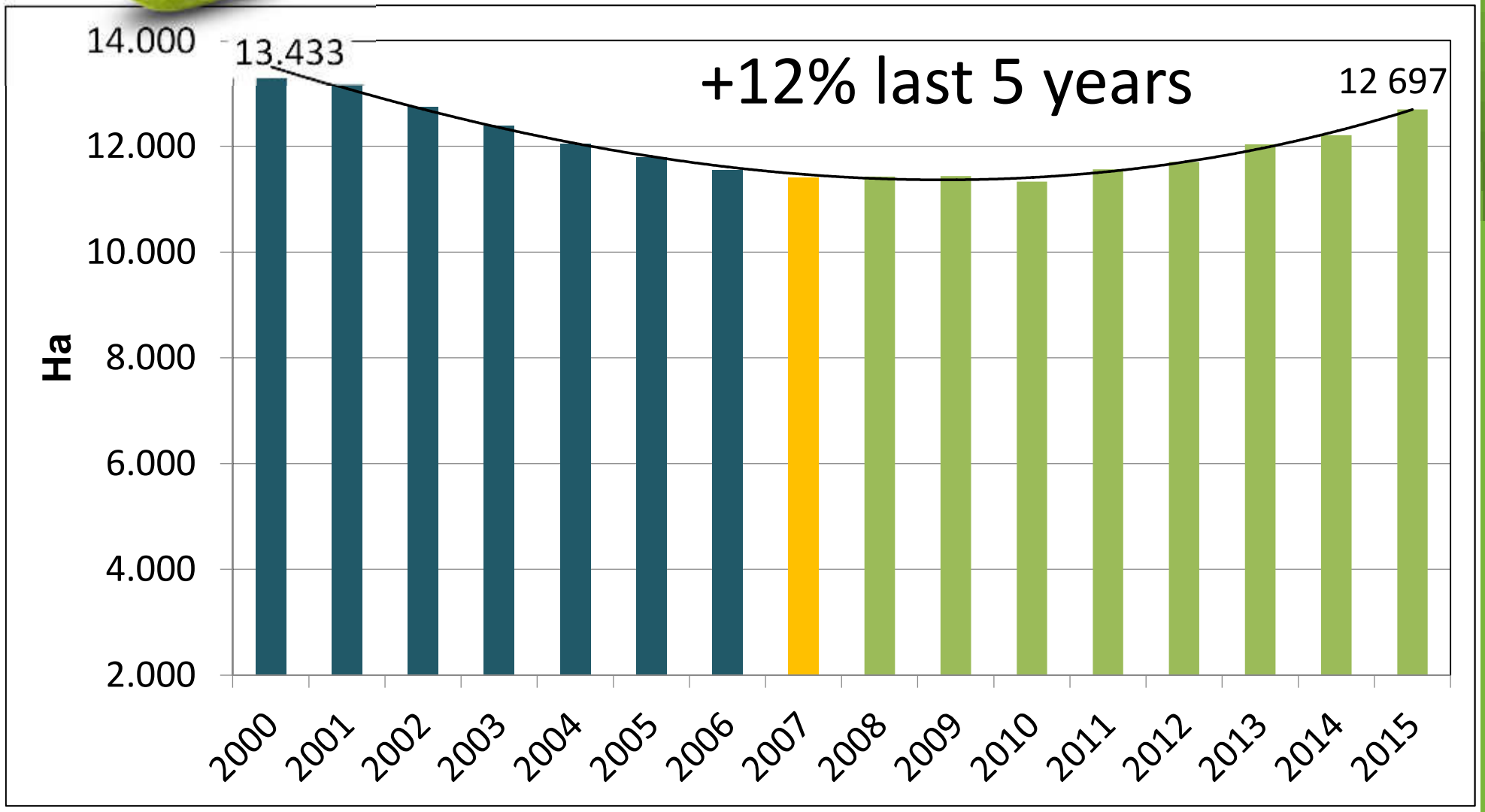

RR
Legend
Feature 1
Untitled Placemark
Google Earth
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
US Dept of State Geographer
©2017 Google
Image Landsat / Copernicus
N
View from Space (Altitude: 8263 mi)


Kgalagadi
Southern
Mpumalanga
Maputo
Gauteng
North West
Swaziland
Karas
Free State
KwaZulu-Natal
Northern Cape
Lesotho
South Africa
Eastern Cape
Western Cape
Google Earth
Data SIO, NOAA, U.S. Navy, NGA, GEBCO
Image Landsat / Copernicus
©2017 AfriGIS (Pty) Ltd.
US Dept of State Geographer
400 mi

# Main Pear producing regions in SA



# SA Pear Hectare Trend



# SA Pear Cultivar Trend

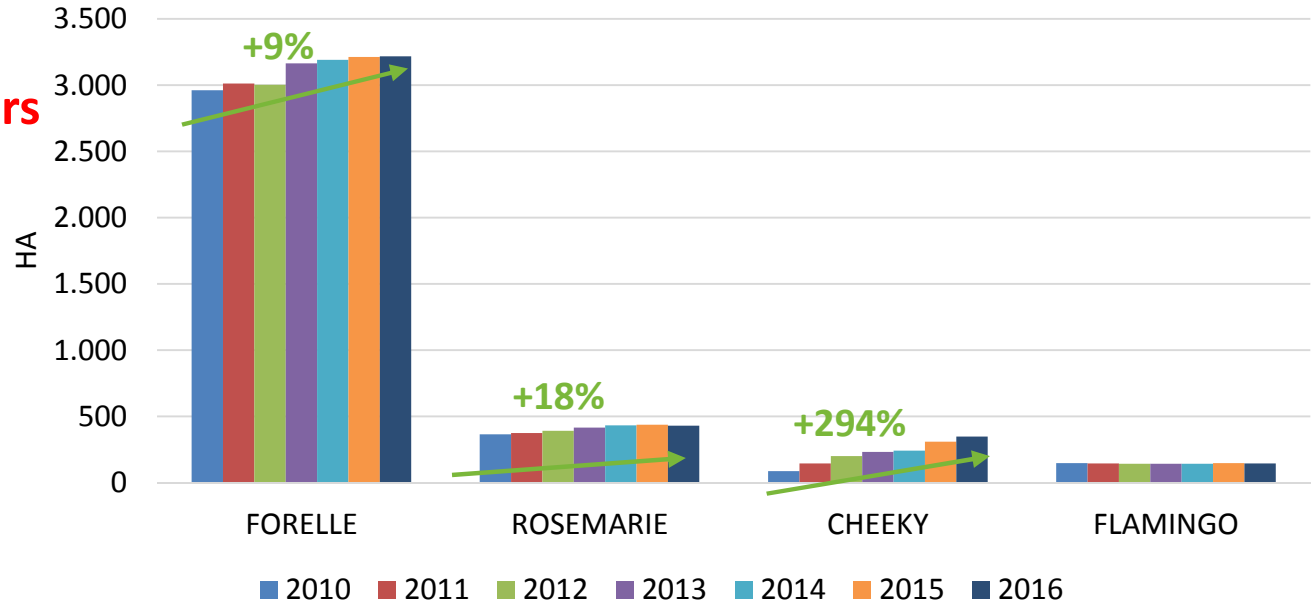
## Green Pears



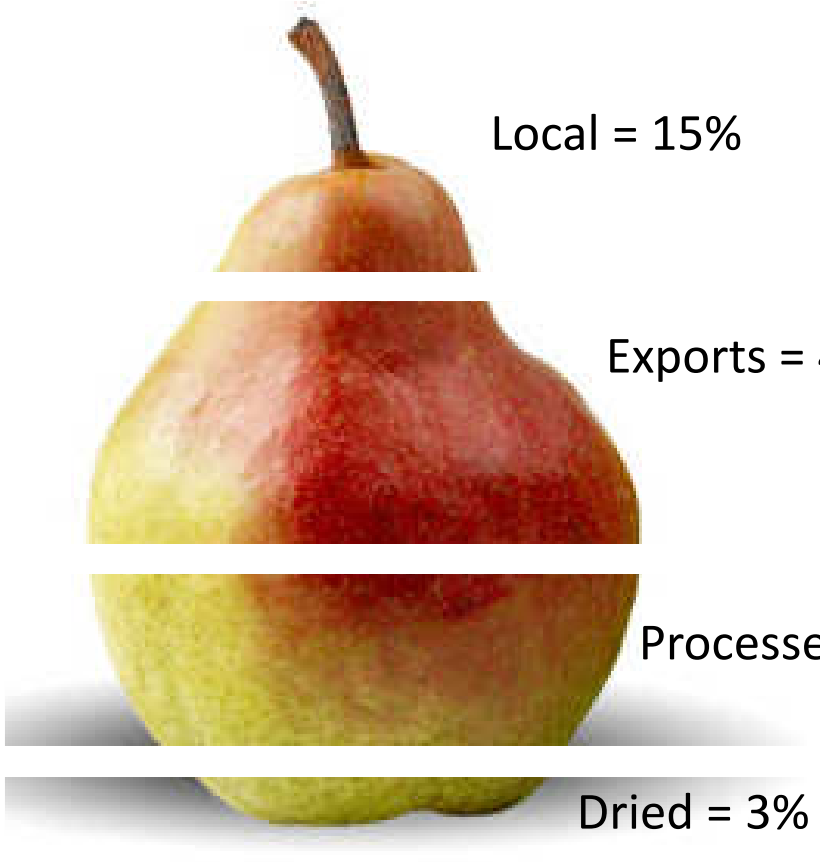

## Brown Pears




## Blush Pears



# SA Pear Industry perspective



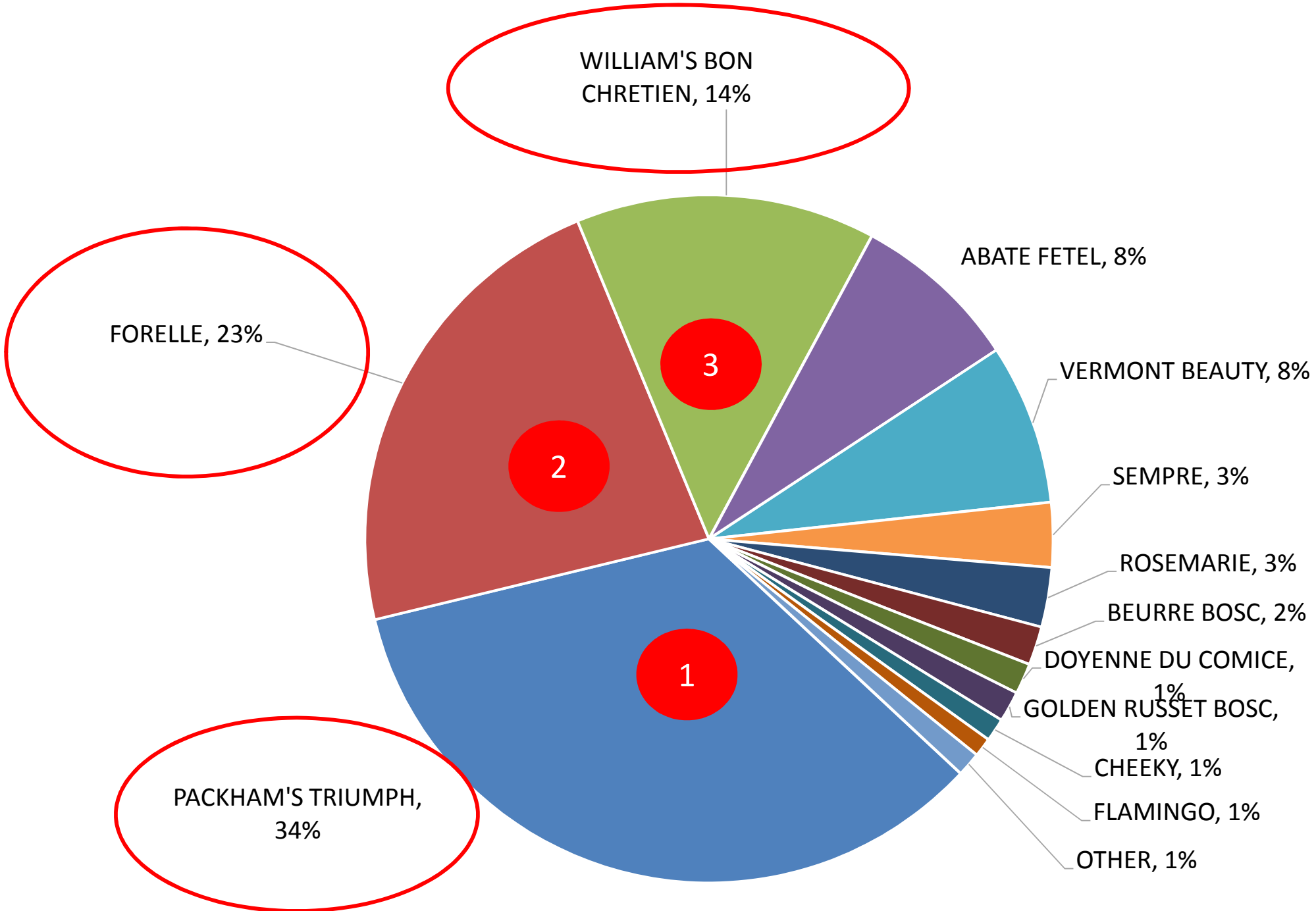

**Planted** 12 697 ha

**Produce** 410 840 tons

**Value** ±R2.4 Bn p.a

(Fresh = 87%)

# 2017 SA Pear Exports

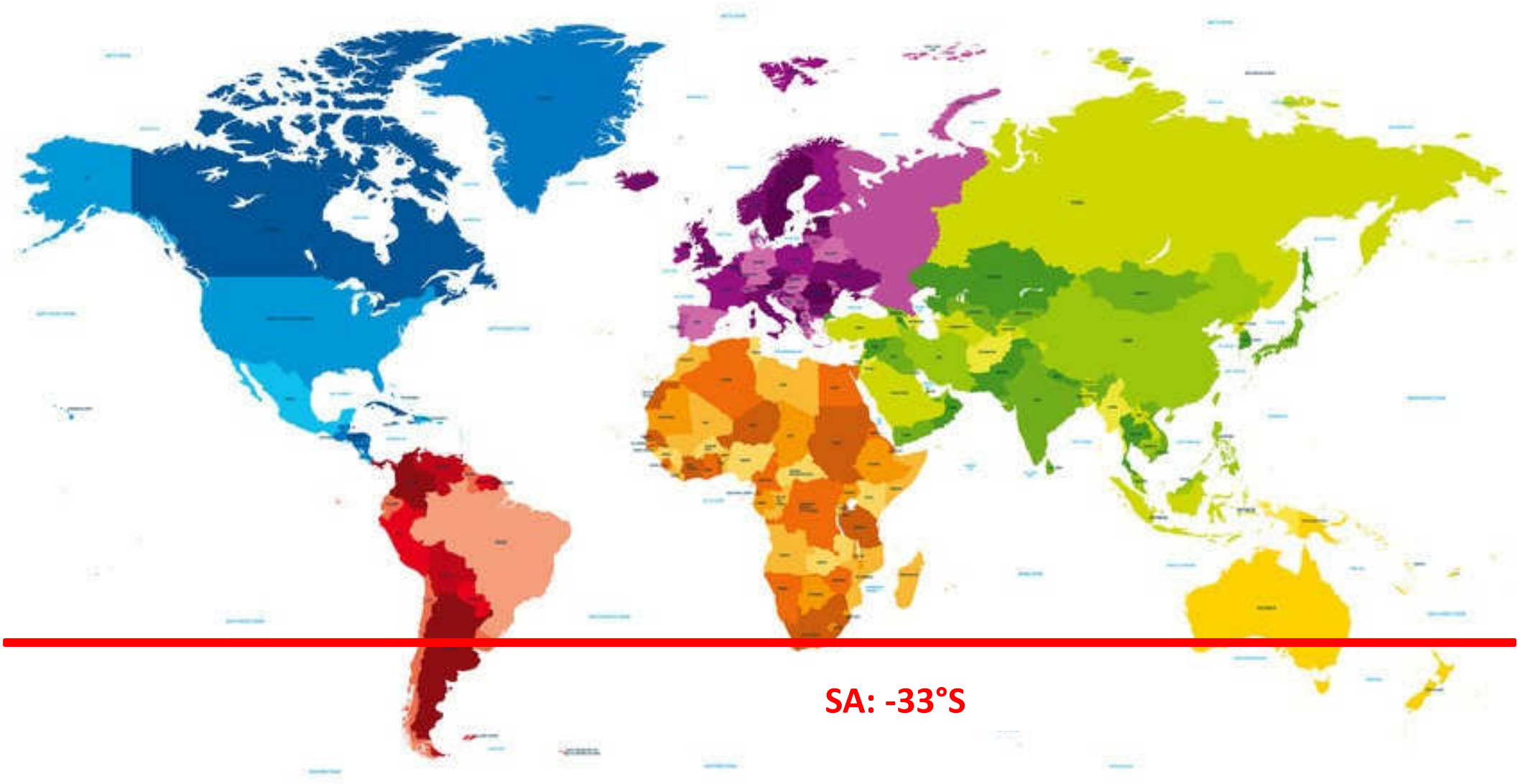


# Main South African Pear Export Regions

# Factors affecting production and fruit size:

1. CLIMATE
2. ORCHARD PLANNING
3. PRODUCTION FACTORS

# In the bigger scheme of things



# CLIMATE

South Africa's main pear production areas lies 33 degrees south of equator.

The altitude in production areas varies between 200 and 1200m above sea level.

There is not sufficient winter chilling which causes delayed foliation.

# DELAYED FOLIATION

Consequences of DF

- Prolonged flowering period
- Less budbreak
- Less spur development
- Less crop

Solution to DF

- Artificial rest breaking
- Spray Mineral oil plus Cyanamide at budswell


If you do not plan well……

# ORCHARD PLANNING

Planting densities:

3,5 – 4,5m x 1,5 – 2,0m

1111 – 1900 trees/ha

Planting densities is a function of:

Soil

Rootstock

Cultivar

ABF: 1500 – 1900 trees/ha

# ORCHARD PLANNING

Tree training: Central leader tree
Well established branches
Bearing units on branches

# ORCHARD PLANNING

Rootstocks: BP1, BP3

Vigorous

Suitable for poor soils

Preferred rootstock for PTR and WBC

# ORCHARD PLANNING

Rootstocks:

Quince BA29 and Quince C51

BA29 more vigorous than C51

Not suitable for sandy soils

BA29 preferred rootstock for ABF and blushed pears

C51 suitable for high potential soils – weak and precocious

# ORCHARD PLANNING

Row direction : North/South

Maximum sunlight interception

Sunburn control

Good quality spur development

# ORCHARD PLANNING

Pollinators : 35%  Rosemarie  Flamingo  Forelle

Better fruit set

More seeds = better internal quality due to calcium uptake

More seeds = bigger fruit with better fruit shape


-PVM CA113

# PRODUCTION FACTORS

PRUNING

GIRDLING

FERTILISING

# PRUNING

- Create new bearing units
- Remove excessive blossom on weak bearing units
- Increase fruit set
- Increase fruit size

# GIRDLING

- Between full bloom and 6 weeks after full bloom
- Increase fruit set
- Increase fruit size
- Control vegetative growth
- Better quality return bloom

# FERTILISING

- Control tree vigour and fruit quality with correct fertilising
- Nitrogen: post harvest and full bloom
- Potasium: 40 days after full bloom

# Investigate the possibility of consistent high production and realising larger fruit size as per market requirements.

**Buchuland Farm, Ceres**
**Block 11: Abate Fetel**
**Plant year: 2005**
**Planting distance: 4.5m x 1.5m**
**Rootstock: Quince BA29**
**Pollinators: Forelle (28%), Flamingo (7%)**

| HARVEST YEAR | PRODUCTION (tons/ha) | FRUIT WEIGHT |
|---|---|---|
| 2013 | 66 | 212g |
| 2014 | 60 | 228g |
| 2015 | 80 | 248g |
| 2016 | 70 | 206g |
| 2017 | 59 | 244g |

# ACKNOWLEDGEMENTS


- Mr Jacques du Preez, Hortgro, South Africa
- Buchuland farm, Ceres, South Africa


THANK YOU