Growing Demand for Confectionery Sunflowers

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Background

- North America native taken to Europe around 1500
- Late 19th century seed found commercial use in U.S.
- 1975, first processing of confectionery sunflower in U.S
- 1987, Paradise Farms begins processing sunflower

Sunflower types by usage

a) Inshell
   i) Black – oil
      - Majority of sunflower seed produced is for oil production. Lower price compared to either birdseed and confectionery market.
   ii) Striped (Confectionery, Birdseed)
      - Birdseed would take the majority of seed. Major market controlled by price.

b) Shelled
   i) Confection – plain roasted, flavoured, salted, food additive
      - This requires large seeds with no discolouration or damage. Generally above average quality.
      - Require specialist varieties more suitable to dehulling than oilseed varieties.

c) Hulls
   i) Hulls are the shell that are removed in the dehulling process.
   ii) The hulls(shell) are blown by air into a storage ready to be mixed with molasses and bagged to be sold primarily for horse and cattle stockfeeds.
Kernel uses

- Raw, Roasted, Salted, Flavoured
- Breads, Cakes, Biscuits
- Health Snacks
- Breakfast Cereals
- Salad Dressings, Dips, Savouries
- Chocolate
- Ice Cream
- Nut Replacement

Australian market - kernel only

- Immature but developing
- Annual Consumption = 2.5-3,000 tonnes
- Paradise Farms = 25-40% market share, balance imports from U.S & China
- Consumption trend - increase in usage approx: 14 % per annum - natural, convenient and healthy.

U.S domestic exports - confectionery sunflower

- In shell product  62,000 Tonne p.a
- Shelled kernel  63,000 Tonne p.a

Sunflower kernel - benefits to products

- Make it more visually attractive
- Give it a special crunchy texture
- Add a new and distinctive flavour
- Upgrades nutritional value
- Cheaper than using other nut products
- Avoids nut allergies

Paradise farms challenges
Consistent supply of quality seed (contract growers) from specific varieties
Development of value added processes and products
HACCP and Food Safety

Paradise farms customers
Paradise farms have been cautious and have knocked back contracts rather than destroy their reputation by being unable to supply.
Sanitarium
Woolworths – Nature’s Selection
Goodman Fielder
Uncle Toby’s
Select Harvests
Domestic Food Traders

Industry opportunities
Increased demand in Australia
Exports to China and European countries

China
Industry working with Breeders and Marketers
Alternate season to the US
Huge demand of 100,000 tonnes per annum

Challenges for markets
a) Breeding has focused on domestic market
   i) Domestic markets have focused on kernels.
   ii) Export more focused on large, long whole seed.
b) Drought
   i) Shortage of supply
   ii) Unable to meet specifications
c) New germ plasm required to suit export markets
d) Imported germ plasm must be altered to resist diseases
   i) Resource requirements high
   ii) Current crops decimated by disease (reduces grower confidence)
e) Price must be sufficient to compete with sorghum for dryland or cotton for irrigated growers

Challenge for breeders
- Will growers move from oilseed to confectionery
- Prices are higher however the risk of not achieving specification can be high.
- To improve the confectionery varieties to improve drought tolerance and disease resistance. Yields/price must be comparable to oilseed.
- Improve yield to allow sunflower to compete with sorghum and cotton.

Conclusion
- Confectionery sunflower has many opportunities.
- Significant breeding required to meet specifications and disease resistance for export markets.
- Cautious enthusiasm required.