

# SPROUT SUPPRESSION 2020

‘Sprout Suppression: The industry perspective’

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# The GB Potato Processing Sector

- 61% of GB potato consumption is in processed form
- 28% of planted area in GB is destined for processing
- 1.7 million tonnes of potatoes are processed annually
- > 11,740 people in employment throughout our sector
- Consumer sales value of UK processed potato market equal to £4 billion (Retail and Foodservice)
- In 2013 the crisp sector exported more than £70M worth of products (year on year growth 12%)

Sources: AHDB Potato Council Market Intelligence 2014-2015; SNACMA: Celebrating the UK snacks industry

# Potato Storage

- Storage for up to **9 months** of the year.
- **Integrated Store management** to control pests & diseases and to manage quality.
- Processing quality management requires warmer storage temperature, which encourages sprout growth.
- Sprouting must be avoided to:
  - ✓ Maintain quality e.g. fry colour
  - ✓ Avoid weight loss
  - ✓ Maintain turgor
  - ✓ Avoid compression bruising
  - ✓ Prevent contamination



# CIPC Stewardship

- All PPA members support stewardship.
- Encouraging best practice in our supply chains.
- Sourcing potatoes from growers who are members of Red Tractor and who apply best practice in their stores.
- CIPC compliant stores
  - ✓ BASIS advisor recommendation following inspection
  - ✓ PICS Store Checklist completed
  - ✓ NAAC audited applicators



# Integrated Store management

- Crop quality going into store
- Efficient store buildings
- Store Hygiene
- Environmental control – temperature, ventilation, humidity, atmosphere (O<sub>2</sub>, CO<sub>2</sub>)
- Pest and disease control
- Crop monitoring, sampling and QC
- Sprout suppression – choice of suppressant, timing, dose

# Research & Knowledge Transfer Focus

- **Box storage** and **optimal applications** research is critical
  - Challenge to maintain even and effective air through boxes
  - Variety of store design
- Development of **varieties** with long dormancy or low temperature storage
  - Not high in breeders' long list of objectives
  - May be a challenge to combine with other key desirable characteristics e.g. PCN resistance
- **Alternatives** must NOT affect other quality parameters



Image courtesy of Potato Council

# Challenges for new Alternatives

- Challenge to step from small laboratory trials to commercial 1,000t stores
- Chemical regulatory approval challenges
- New chemicals need to be approved for:
  - Lack of taint
  - Impact on sugars
  - Efficacy of sprout control
- Need to develop new protocols
  - Application management for optimal efficacy
  - Effect of storage environment on efficacy after application
- Higher costs?



**QUESTIONS ?**



Agriculture & Horticulture  
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