Belchim Crop Protection

• Celebrating its 30th year as a CCP market access company
• Corporate HQ based in Belgium; with regional HQ based in Guelph (Canada), Wilmington, DE (USA), Kula Lumpur (Asia)
• Employs 500 people globally
• Expanding globally; completing 5 acquisitions in last 24 months
Innovation at Belchim

✓ Investing in soft chemicals
✓ With a good profile
✓ Dedicated to IPM for conventional and biological solutions
✓ Intention of placing 1 new molecule per year into the market
✓ Partnering with growers of specialty crops
Biopesticide Products Under Development for the US Market

**ReLoad Fungicide**

- Mono and dibasic sodium, potassium and ammonium salts of phosphorous acid
- Exceptional efficacy against fungi of the oomycetes class
- Also has indirect impact on the immune response in plants, lending efficacy against ascomycetes like anthracnose & dollar spot on turf

**Beloukha Herbicide**

- Optimized formulations of Pelargonic acid
- Provides rapid burn-down of green tissue
- Non-selective and non-systemic
- Features lend it to a wide range of applications
TOUGH® (Pyridate) Herbicide Introduction

- HRAC Group 6 – Underutilized mode of action
- POST control of hard to control resistant weeds
  - Kochia, Waterhemp and Palmer
- Quick burn down
- Flexible →
  - Wide window of application
  - No rotational restrictions
  - Positive environmental profile
  - Selective – potential for use on a range of crops
Pyridate History

- Active ingredient since 1976
- Developed by Agrolinz
- Belchim has acquired worldwide data rights
- Pyridate re-registered in EU – Annex I inclusion in 2016
- North American registrations voluntarily withdrawn in early 2000’s
- Re-submitted for registration in the US (2016) and Canada (2018)
Weeds controlled

- POST application
  - Weeds - 3-5” tall

- Broadleaved weed control
- Contact activity only

Kochia  Common Lambsquarters  Black Nightshade  Marestail (Horseweed)

Pigweeds  Palmer  Waterhemp
Tough provides excellent POST control of Lambs quarters and Pigweeds

- ++ Chamomille
- ++(+) Common groundsel
- +++ Lambs quarters
- +++ Pigweeds
Efficacy on Kochia

Tough Provides excellent POST control of Kochia

Kansas trials in fallow 2016

Tough @ 24oz/ac

Weed density of UTC
Tough®: Proposed 1\textsuperscript{st} Registration

- Field Corn
- Peanuts
- Chickpea
- Mint
- Brassica head and stem vegetables, cabbage, collards*  

*Brassica vegetables will require dry formulation
Crops on IR-4 Project List

• Asparagus
• Clover
• Sweet corn
• Kale
• Mint (reduced PHI)
• Pea (edible podded and succulent shelled)
• Tomato
Other Potential Crops of Interest for Pyridate

- Herbs and spices
- Sorghum
- Alfalfa
- Bulb vegetables
- Carrots
- Other legume crops
- Tobacco
Belchim Summary

- Three new products under development for the US market
  - ReLoad® Fungicide (salts of phosphorous acid) - Biopesticide
  - Beloukha® Herbicide (Pelargonic Acid) - Biopesticide
  - Tough® Herbicide (Pyridate) - Conventional

- We value your input and collaboration