



ONTARIO BIOMASS PRODUCERS  
CO-OPERATIVE INC.

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# Miscanthus Rhizome Harvest & Planting

David Smith,  
All Weather Farming Inc.

Ag Biomass Day 2015



# All Weather Farming Inc.



# History of Miscanthus Rhizome Harvest & Planting

**Started in 2009, original purpose: own fuel**

2009: Planted nursery with 2000 rhizomes

2010: dug roots by hand and replanted (six rows)



# Spring 2011: Planting in Clay Loam



# Evolution of Planter

**2009-2011** used a one row, two man planter

**2012** used a modified four row transplanter to plant 10 acres of nursery on sandy soils

**2013** began work on automated rhizome planter

✓ No-till planter, multiple soil types

✓ Can plant 40 acres per day with **one** operator

**2014** Improvements:

✓ Added liquid fertilizer application

✓ In Furrow packing wheel

**2015** Added wobble coulters and rear packing wheels



# April 2012 Planted 10 Acres





# Four Row Planter in Action!



2013, four row planter, no-till,  
into corn stubble.

# Spring 2014





# Ready for 2015 Action



Spring 2015

Spring 2015





# Strawberry Plant Digger 2011 & 2012



# Rhizomes



One year old root of a single miscanthus plant

May 2013, one year old root.



# Digging Assembly Line in Full Motion





# Digger precuts roots, eliminates dirt and loads into wagon





# Dug and cleaned roots

## December 2014 trial



# Spring 2014 Miscanthus Harvest





# The Future Looks Promising!



# Acknowledgments

- Growing Forward 2
  - Continuing Machinery Development
- OMAFRA
  - Poultry Bedding Research
- University of Guelph
  - Rhizome Research
- Ontario Biomass Producers





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**Thank you !**

