

# ONTARIO AGRI-FOOD TECHNOLOGIES



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Ontario Agri-Food Technologies  
[www.oaft.org](http://www.oaft.org)

## Farm Associations

- Dairy Farmers of Ontario
- Egg Farmers of Ontario
- Grain Farmers of Ontario
- Ontario Federation of Agriculture
- Ontario Fruit and Vegetable Growers' Assoc.
- Ontario Pork
- Ontario Processing Vegetable Growers
- Ontario Soil & Crop Improvement Assoc.

## Universities/Colleges

- Conestoga College
- Trent University
- University of Guelph

## Industry

- Advanced Micro Polymers
- Ag Energy Co-operative Ltd.
- BASF Canada Inc.
- Bayer CropScience Canada
- BIOMAR Inc.
- BIOX Corporation
- Canadian Seed Trade Assoc.
- Dow AgroSciences
- GreenField Ethanol
- Guelph Junction Railway Co.
- IGPC Ethanol Inc.
- INAC Services Limited
- Ingredion Canada Incorporated
- Life Sciences Ontario
- MNP LLP
- Monsanto Canada Inc.



- Pioneer Hi-Bred Limited
- Polymer Distribution Inc.
- Royal Bank of Canada
- SPB Solutions Inc.
- Sevita International
- Syngenta Canada, Inc.

## Government

- City of Guelph
- City of Port Colborne

## Affiliates

- Ontario Ministry of Economic Development , Trade and Employment

## Funding Partners

- Agriculture and Agri-Food Canada
- Ontario Ministry of Agriculture, Food and Rural Affairs



# OAFT's mission

- To ensure that Ontario agriculture has access to the latest technologies to compete in a global economy.
- To create market opportunities for the business of agriculture beyond traditional food and feed markets.

# How do we do this...

1. Part of the Agri-Tech Commercialization Centre (BioEnterprise, Soy20/20, OAFT)
1. Networking is key! (dating service)
1. Positioned on many committees/boards
  - Eg: Industrial Bioproducts Value-chain
2. Key connections within all stakeholder groups (Academia, Industry, Producer Groups, Government)

# OAFT programs

## **Members only:**

- two members with a great idea
- \$10,000 to develop business plan, etc.

## **Rapid Response to Business Opportunities (ROI >112:1)**

- available to anyone
- not for “hunting expeditions”
- decision made with 48 hours
- covers expenses only

## **Capacity Building: (ROI >70:1)**

- \$10,000 to consultant to write proposal
- you must have skin in the game
- right funding body - line up ducks

## **Rapid Response to Research Needs**

- 50/50 cost sharing to \$20,000 from us
- Again, decision in 48 hours
- Based on project results report

## **Game Changer Videos**

- Marketing videos for companies – see [www.oaftgamechangers.ca](http://www.oaftgamechangers.ca)

# AMAZING GRAINS

## **Sprouted Ancient Grains with Super Seeds and Vitamins from Whole Fruits**

**Our Story:** Our founders have an extensive history in food and ingredients. Jerry Chizick a seasoned Food Marketing and business executive got together with Andrew Stewart an experienced Food Technologist to form a cutting edge new company. Both were working on great food products with healthy ingredients when they decided to develop a breakfast cereal which they called “the healthiest food on the planet.” The project which started as an idea for very nutritious cereal soon after became an opportunity to use the mix in a variety of products. Amazing Grains provides nutrition enhanced products that are simply as nutritious as mother nature designed them.



03/22/2016



# The Quinta Solution



**Satisfy the exploding Global and  
North American demand with  
a high protein, high quality  
specialized local Ontario quinoa.**



# Ontario Quinoa



**Week 6**



**Week 8**



**Week 12**

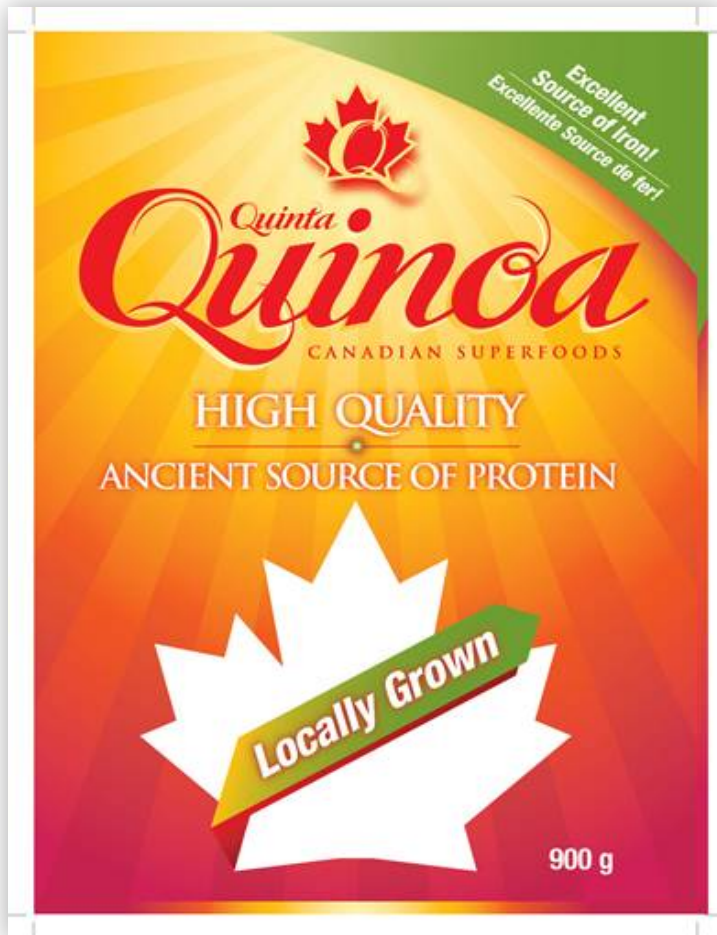






# High Quality Quinoa

**Our mission** is to produce high protein, high quality Quinoa in Ontario.



Excellent Source of Iron



Excellent Source of Mg



High in Protein



High in Fibre



High in Zinc



Good source of Ca



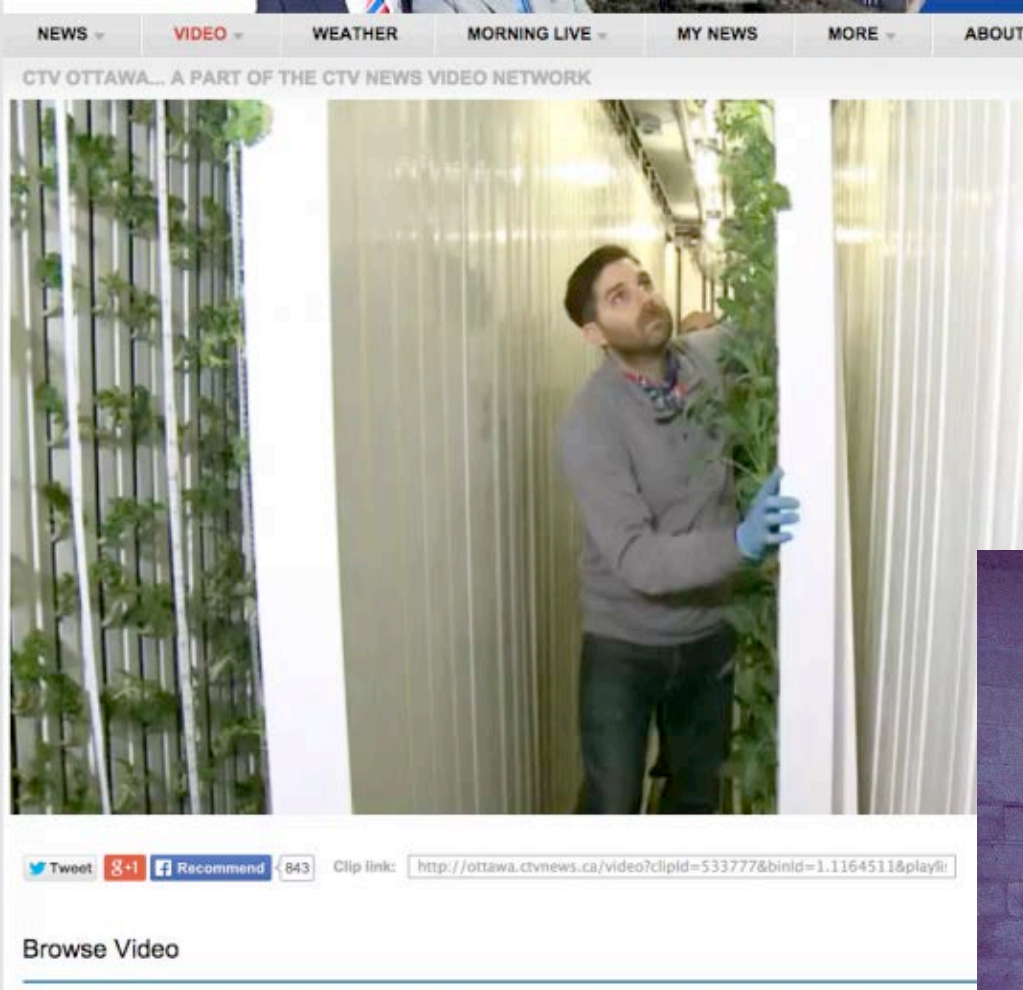


**MODULAR  
FARMSCO**

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**smart  
greens**



# Smart Greens







# ZIPGROW FARM WALL

START GROWING



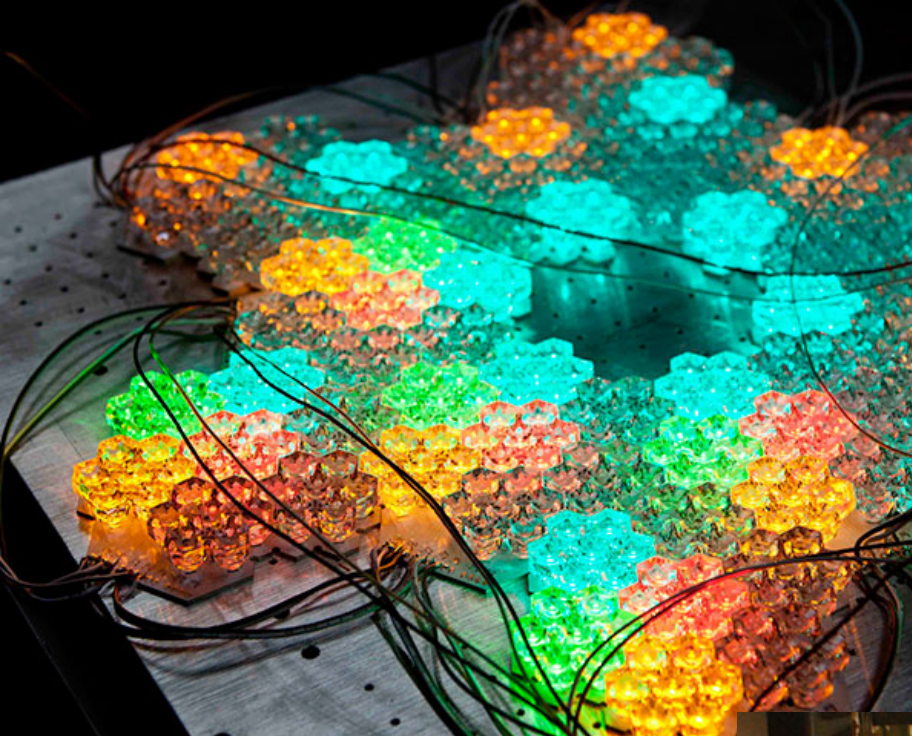


# ZIPFARM

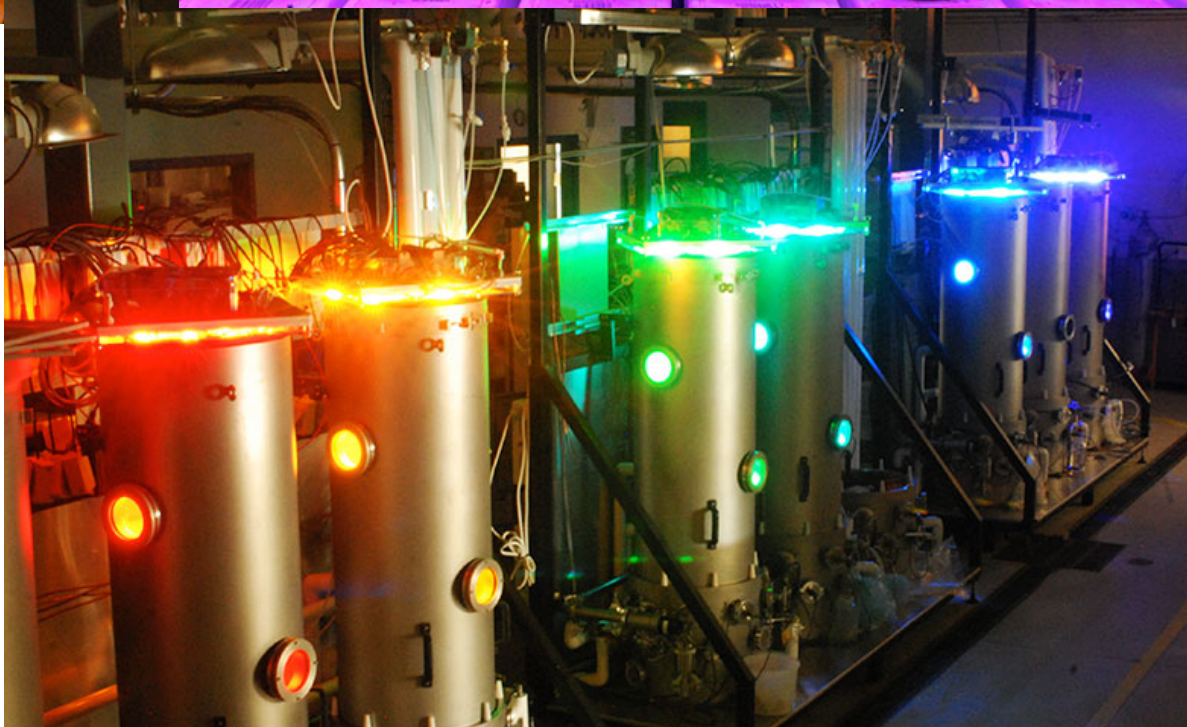
THE INDOOR FARM THAT SCALES

REQUEST MORE INFO





# Intravision





# About P&P Optica

- We manufacture innovative systems that generate chemical imaging data.
- Our innovative chemical imaging technology can “see” the chemical composition of materials.
- These materials include agri-foods of all kinds because food and chemistry are intertwined.



# Agri-Food Industry: Address Key Challenges

## Efficiency



### Optimize processes:

- Reduce waste
- Divert lower quality product

## Quality



### Grading:

- Increase revenues
- Access new markets
- Competitive advantage

## Safety



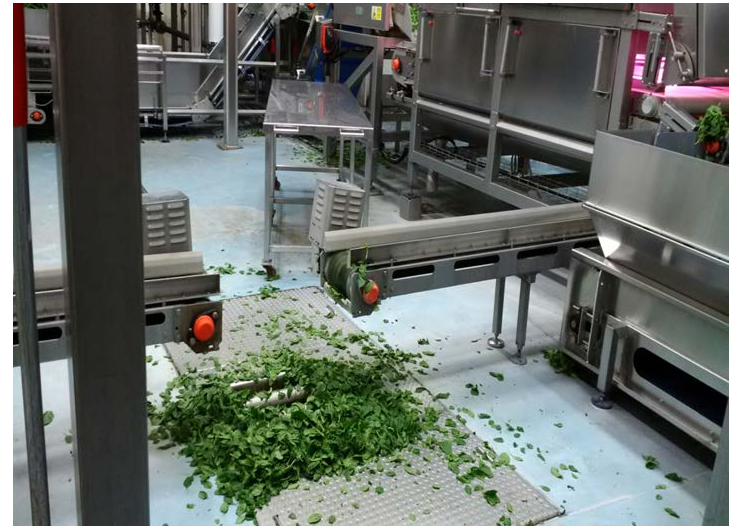
### Foreign objects:

- Recalls
- Lawsuits
- Prevention – costly and inefficient

# Waste Problem in Produce

- Current sorting technology is inefficient
  - Evaluates leaves based on size, shape, colour only
  - Waste stream – over 80% is good spinach
- Volume! 3,300 pounds of spinach per hour
- Current level of waste has an accepted standard which isn't acceptable!
- In a highly-competitive market:
  - Increase capacity
  - Cut costs
  - Address inefficiencies

What  
comes  
first?  
P&P Optica 2015





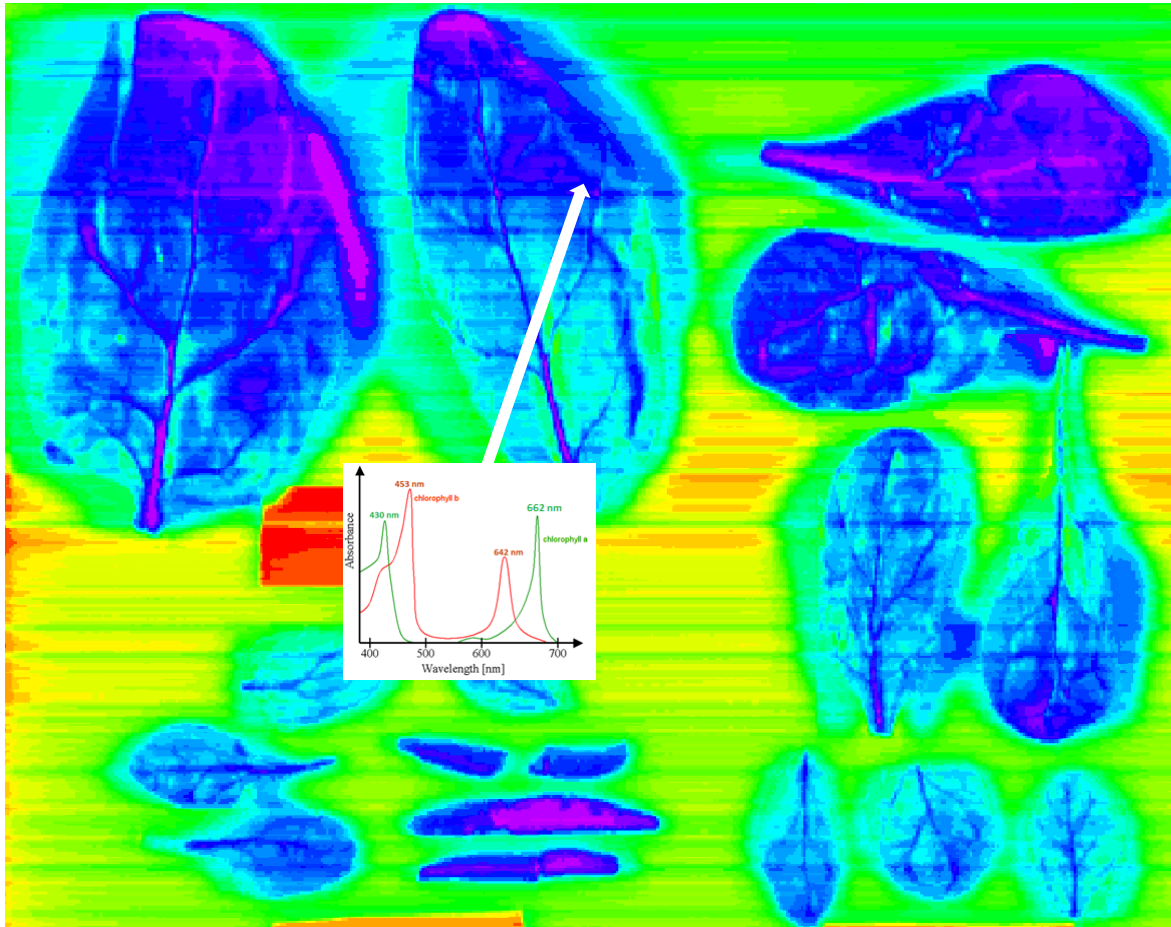
# Traditional Imaging



Information  
about:

- Size, colour, shape

# PPO Chemical Imaging



See chemical makeup:

- Moisture, degradants, impurities, chemical reactions, leaf health

As well as:

- Size, colour, shape



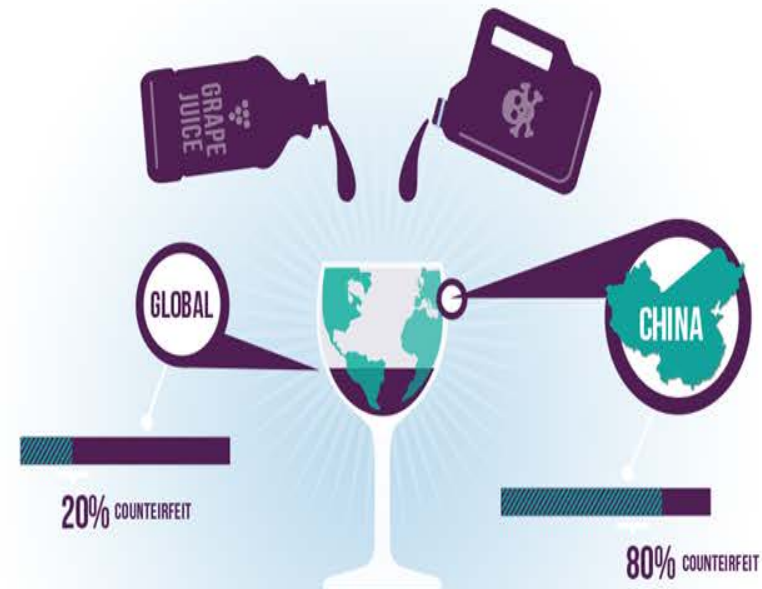
Everything you want to know is  
**JUST A TAP AWAY**





## We have a big knock-off problem!

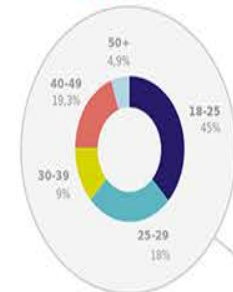
- **60 - 80%** of Canadian Icewine is Counterfeit
- **20%** of Wine Globally is Counterfeit
- Producers have no affordable digital authentication system
- Consumer mistrust of the distribution chain
- \$1.7 trillion dollars of counterfeit goods



## Customer Analytics

Sell more by knowing the 5 W's.

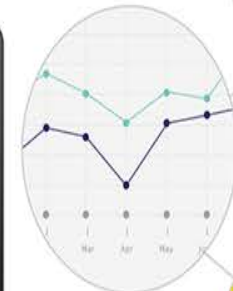
### 1. Who



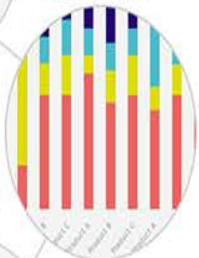
### 2. Where



### 3. When



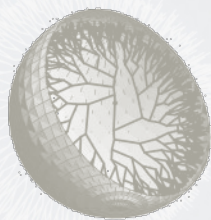
### 4. What



### 5. Why



# Tiny Particles with Huge Possibility





# Introducing PhytoSpherix™

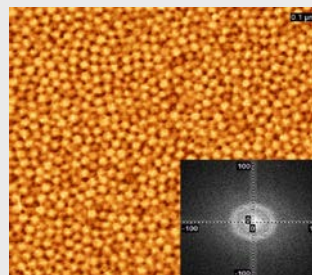
The world's only Monodisperse, Natural Nano-Glycogen

Safe & Natural



PhytoSpherix™

Monodisperse



The main reason our material has such unique properties



Non-toxic  
Unique marketing appeal

“Safe & Natural?” Last year, ~300,000 tons of PhytoSpherix™ were eaten – now that’s a big experiment!

# 3 Huge Markets

## Cosmetics

### Safe & Natural:

- Skin Creams
- Skin Health
- Anti-ageing



## Pharmaceuticals

- Drug Delivery
- New Antibiotics
- Immunomodulation



## Food & Nutrition

- Stabilize Vitamins
- Enhance Bioavailability
- Sports Drinks



# Poultry

1. Rellidep – United Paragon Associates

27M eggs/day

2. Egg Sexing Technology

1. AgriLux Poultry lighting

2-3% increased production





# Thank You

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519-826-4195

[www.oaftgamechangers.ca](http://www.oaftgamechangers.ca)