Intellectual Property
Best Practices and Developing an Intellectual Property Protection Strategy

Alissa M. Eagle
Best Practices

- IP Strategy
- Education and Training
- Confidential Information
- Notebooks
- Invention Disclosures
- Record Retention
- Publication Review Process
- Agreements
- Ethics and Compliance
# Best Practices

<table>
<thead>
<tr>
<th>Material Acquisition and Storage</th>
<th>Treaties and Laws</th>
<th>Bag and Other Labeling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trademarks and Logos</td>
<td>Monitoring and Detection of Third Party Material</td>
<td>Post Patent Process</td>
</tr>
<tr>
<td>Potential Third Party Issues</td>
<td>Freedom to Operate Analysis</td>
<td>Enforcement</td>
</tr>
</tbody>
</table>
Developing an Intellectual Property Strategy

Develop Protection Strategy
- Why Protect
- How to Protect
- What to Protect

Develop Process
- Identification of inventions
- Invention Disclosure
- Review of inventions and drafting
- Where to Protect
- Enforcement
Why Protect?

- Asset
- License
- Create value
- Freedom to Operate
- Deterrent effect
- Option to pursue action
How to Protect?

- Patent
- Bag Tag
- Trademark
- Plant Variety Protection (PVP)
- Agreement
- Copyright
What to Protect with a Patent?

Native Traits

Methods

Molecular Technologies

Breeding Technologies

Genetics

Other Technologies
A Little Background – Monsanto Vegetable Seeds

More than 2,000 seed varieties sold in 160+ countries.

More than 98% of R&D investment for breeding better seeds to improve vegetable productivity, quality and consumer appeal, including taste and flavor.

22 different crop families including:
- Broccoli
- Carrot
- Cauliflower
- Cucumber
- Lettuce
- Melon
- Onion
- Pepper
- Spinach
- Sweet Corn
- Tomato
- Watermelon & more!

2 Biotech vegetable crops:
- Squash
- Sweet Corn

Monsanto
Frescada® Lettuce

- A sweet tasting lettuce, very low in bitterness and crunchier compared to romaine
- Greener color and more flavor compared to iceberg
- Has more vitamin C and folate compared to iceberg
• Beneforté® broccoli fresh florets naturally contains 2-3x the phytonutrient glucoraphanin than other broccoli varieties

• Glucoraphanin boosts your body’s antioxidant enzyme levels.

• Antioxidant enzymes help maintain the antioxidant activity of vitamins A, C, and E

*2009 Monsanto trials
## What to Protect?
### Selected Granted Claims

| **Iceberg/Romaine Lettuce**  
| **U.S. 8,729,343** |
| --- | --- |
| • A lettuce seed capable of producing a lettuce plant, wherein said lettuce plant comprises at least two morphological characteristics selected from the group consisting of an elliptical stature, a spatulate leaf shape, and a semi open head formation; and wherein said lettuce plant has a first outer leaf of a head having a length to width ratio between about 1.2 and about 2.7, and a color which ranges from about RHS 146A to about RHS 146B. |

| **Downy Mildew Resistant Cucumber**  
| **U.S. 8,859,859** |
| --- | --- |
| • A method of producing a cucumber plant having resistance to Downy Mildew comprising the steps of:  
  • crossing a cucumber plant of accession PI197088 with a second cucumber plant having at least one desired traits; and  
  • selecting at least a first progeny cucumber plant resulting from the crossing that comprises resistance to Downy Mildew and the desired trait. |

| **Beneforté® Broccoli**  
| **U.S. 6,340,784** |
| --- | --- |
| • A broccoli plant having elevated levels of 3-methylsulfanylpropyl glucosinolates, or 4-methylsulfanylbutyl glucosinolates, or both, elevated above that initially found in *Brassica oleracea* breeding lines, wherein the broccoli plant is a hybrid plant produced by crossing a broccoli breeding line with a wild *Brassica* species selected from the group consisting of *B. drepanensis* and *B. villosa*. |
Process for Patent Protection

- Identification of Invention
- Invention Disclosure Submission and Review
- Data Review and Development
- Claiming Strategy
- Application Drafting Process and Timeline
- Seed Deposits
- Timing of Filing
- Review Prior to Anniversary Date
- Foreign Filing Decisions
Where to Protect?

- Scope of Protection in Country
- Cost Over Life of Patent
- Type of Claims and Invention
- Commercial Value
- Research and Development Locations
- Strength of Patent System
- Enforcement Options and System
- Compulsory Licensing
- Patent Term Extensions
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THANK YOU!
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