



Arcadia

B I O S C I E N C E S

Credit Suisse 6th Annual Small & Mid Cap Conference

September 17, 2015

Forward-looking statements



“Safe Harbor” statement under the Private Securities Litigation Reform Act of 1995: This presentation contains forward-looking statements about the company and its products, including statements relating to components of the company’s long-term financial success; the company’s traits, commercial products, and collaborations; the company’s ability to manage the regulatory processes for its traits and commercial products; the company’s anticipated financial results; current and future products under development; additional collaboration agreements; the regulatory process; business and financial plans; and other non-historical facts.

Forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially, and reported results should not be considered as an indication of future performance. These risks and uncertainties include, but are not limited to: the company’s and its partners’ ability to develop commercial products incorporating its traits and complete the regulatory review process for such products; continued competition in seed traits and other products; the company’s compliance with laws and regulations that impact the company’s business, and changes to such laws and regulations; the company’s reliance on its collaborators to commercialize products incorporating its seed traits; the company’s future capital requirements and ability to satisfy its capital needs; the company’s exposure to various contingencies, including those related to intellectual property protection, success of field trials, regulatory compliance, the speed with which regulatory approvals are received, and public acceptance of biotechnology products; developments related to foreign governmental regulations, political climate, currencies, and economies; successful operation of the company’s joint ventures; fluctuations in commodity prices; the company’s ability to obtain a significant portion of the increased value to farmers from products that incorporate its traits; and the effect of weather conditions, natural disasters, and accidents on the agriculture business or the company’s facilities.

Further information on these and other factors that could affect the company’s financial results are included in filings it makes with the Securities and Exchange Commission from time to time, including the section entitled “Risk Factors” in the company’s Quarterly Report on Form 10-Q for the quarter ended June 30, 2015 and other filings. These documents are or will be available on the SEC Filings section of the Investor Relations pages of the company’s website at www.arcadiabio.com. All information provided in this presentation is as of the date hereof, and Arcadia Biosciences, Inc. disclaims any obligation to update this information.

Arcadia is a leading agricultural biotechnology trait company

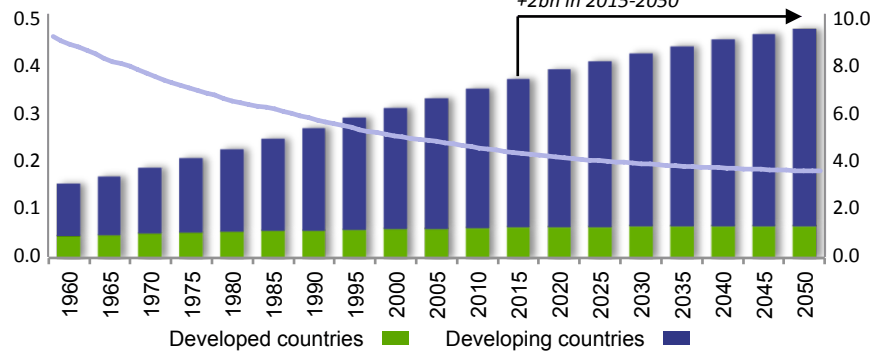


Portfolio of late-stage yield traits creates a compelling case for new investment in agriculture

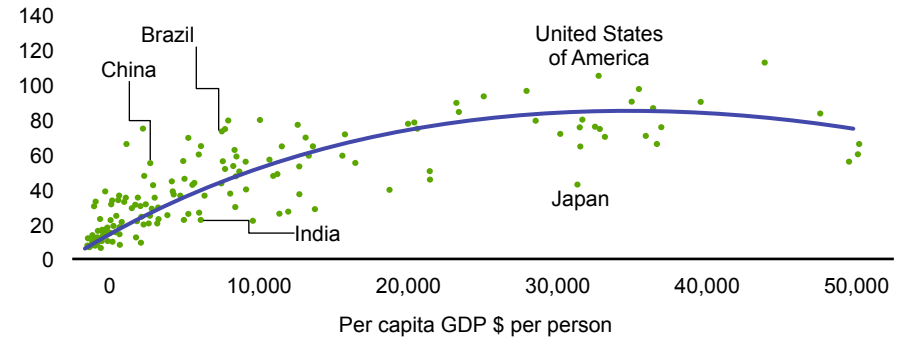
Agricultural yield is always critical, and traits create significant value

Population growth and increasing per capita income drive need for increased yield

Arable land per capita (ha)

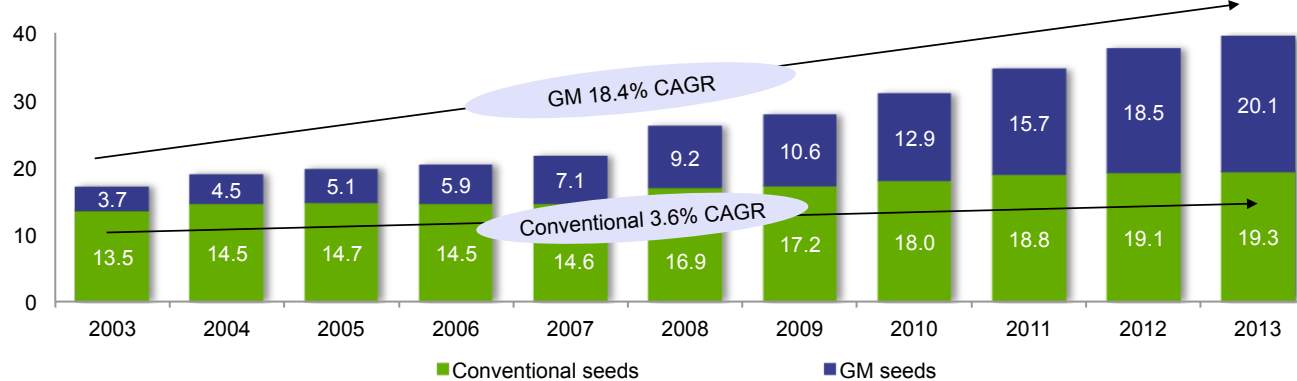


Meat consumption vs. GDP: more income = more calories (Per capita meat consumption, kg/year)



Seeds are the vehicle for delivering improved genetics and have had tremendous growth

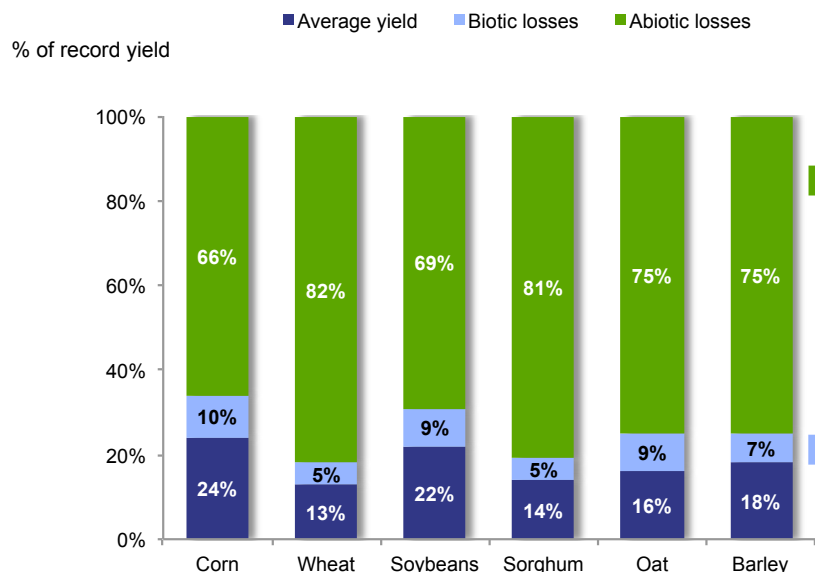
Value of global seed market (\$B)



Source: Food and Agriculture Organization of the United Nations (FAO), Seed Industry Synopsis, Phillips McDougall, June 2014

Significant growth potential exists from next wave of abiotic stress traits

Abiotic stress accounts for 66-82% of lost yield



Addressing yield losses caused by abiotic stresses represents untapped growth opportunity

Limited number of commercially available abiotic stress solutions on the market:



Multiple commercially available biotic stress solutions (partial list):



- GM seed market of approximately \$20B based primarily on biotic stress management – highly competitive, multiple products; zero-sum play
- Abiotic stress management has greater value potential, minimal current products, and opportunity for major market expansion

Source: Biochemistry and Molecular Biology of Plants, Buchanan, Grissem, Jones, American Society of Plant Physiologists, 2000.

Clear path to sustained financial growth with 50 products in development



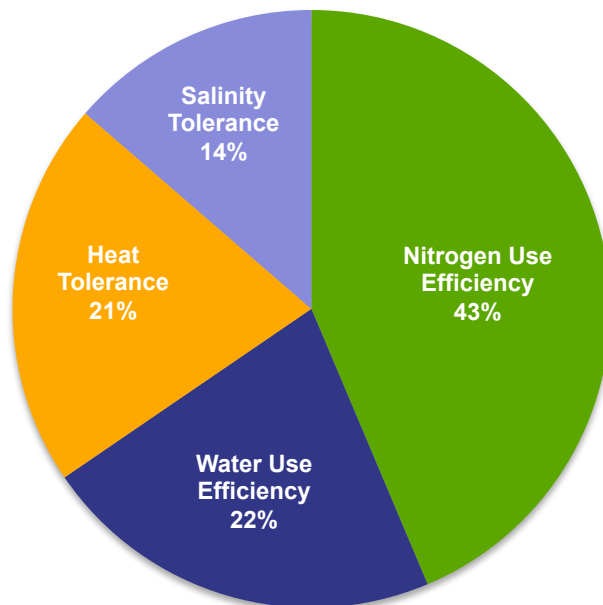
| PROGRAM | Crop | Collaborator(s) | Phase | | | | | Key Markets | |
|--------------------------------------|--|---------------------------------|-----------|---|---|---|------------------|-----------------------|--------|
| | | | D | 1 | 2 | 3 | 4 | | 5 |
| PRODUCTIVITY TRAITS | | | | | | | | | |
| Nitrogen Use Efficiency (NUE) | Wheat | Limagrain, Mahyco, CSIRO, ACPFG | ■ | ■ | ■ | ■ | | Global | |
| | Rice | Mahyco, AATF | ■ | ■ | ■ | ■ | | Asia | |
| | Soybean | Verdeca | ■ | ■ | | | | Americas, Asia | |
| | Corn | - | ■ | ■ | | | | Global | |
| | Cotton | Mahyco | ■ | ■ | ■ | | | Americas, Asia | |
| | Canola | - | ■ | ■ | ■ | ■ | | N. America, Asia | |
| | Sugarcane | US Sugar, SASRI, Mahyco | ■ | ■ | ■ | | | S. America, Asia | |
| | Barley | - | ■ | ■ | ■ | ■ | | N. America, Australia | |
| | Turf | Scotts | ■ | ■ | ■ | | | N. America | |
| | Tree Crops | Arborgen, Futuragene | ■ | ■ | ■ | | | Brazil, N. America | |
| | Vegetables | Mahyco | ■ | ■ | | | | Asia | |
| | Water Use Efficiency (WUE) Drought Tolerance (DT) | Wheat (WUE) | Limagrain | ■ | ■ | ■ | | | Global |
| | | Wheat (DT) | Bioceres | ■ | ■ | ■ | ■ | | Global |
| Rice (WUE) | | Mahyco | ■ | ■ | ■ | | | Asia | |
| Soybean (DT) | | Verdeca | ■ | ■ | ■ | ■ | ■ | Americas, Asia | |
| Corn (WUE) | | Genevive | ■ | ■ | | | | Global | |
| Cotton (WUE) | | Mahyco | ■ | ■ | ■ | | | Americas, Asia | |
| Canola (WUE) | | - | ■ | ■ | ■ | | | N. America, Asia | |
| Sugarcane (WUE) | | US Sugar, SASRI, Mahyco | ■ | ■ | | | | S. America, Asia | |
| Sugar Beets (WUE) | | SES Vanderhave | ■ | ■ | | | | N. America | |
| Tree Crops (WUE) | | Arborgen, Futuragene | ■ | ■ | ■ | | | Brazil, N. America | |
| Vegetables (WUE) | | Mahyco | ■ | ■ | | | | Asia | |
| Salinity Tolerance (ST) | | Wheat | Mahyco | ■ | ■ | ■ | | | Global |
| | | Rice | Mahyco | ■ | ■ | ■ | ■ | | Asia |
| | Cotton | Mahyco | ■ | ■ | ■ | | | Americas, Asia | |
| | Canola | Mahyco | ■ | ■ | ■ | | | N. America, Asia | |
| | Sugarcane | Mahyco | ■ | ■ | | | | S. America, Asia | |
| | Vegetables | Mahyco | ■ | ■ | | | | Asia | |
| | Wheat | Confidential | ■ | ■ | ■ | ■ | | Global | |
| Herbicide Tolerance* | Wheat | Confidential | ■ | ■ | ■ | ■ | Global | | |
| Heat Tolerance | Wheat | USAID, CIMMYT | ■ | | | | Global | | |
| Trait Stacks | | | | | | | | | |
| NUE/WUE/ST | Rice | AATF | ■ | ■ | ■ | ■ | Asia | | |
| NUE/DT | Wheat | Bioceres | ■ | ■ | ■ | | Global | | |
| NUE/WUE | Wheat | Limagrain | ■ | ■ | ■ | | Global | | |
| NUE/WUE | Canola | - | ■ | ■ | ■ | | N. America, Asia | | |
| PRODUCT QUALITY TRAITS | | | | | | | | | |
| GLA Oil | Safflower | Abbott | ■ | ■ | ■ | ■ | ■ | N. America, Asia | |
| Resistant Starch* | Wheat | - | ■ | ■ | ■ | ■ | ■ | Global | |
| Post Harvest Quality* | Tomato | Bioseed | ■ | ■ | ■ | ■ | ■ | Asia, N. America | |
| ARA Oil | Safflower | Abbott, DuPont Pioneer | ■ | ■ | ■ | ■ | | N. America, Asia | |
| Grain Quality* | Wheat | Ardent Mills | ■ | ■ | ■ | | | Global | |
| Low Gluten* | Wheat | - | ■ | | | | | Global | |

Phase: D=Discovery; 1=Proof of Concept; 2=Greenhouse / Early Field Trials; 3=Additional Field Trials / Product Development; 4=Regulatory / Pre-Commercial; 5=Commercialized
 * Non GM

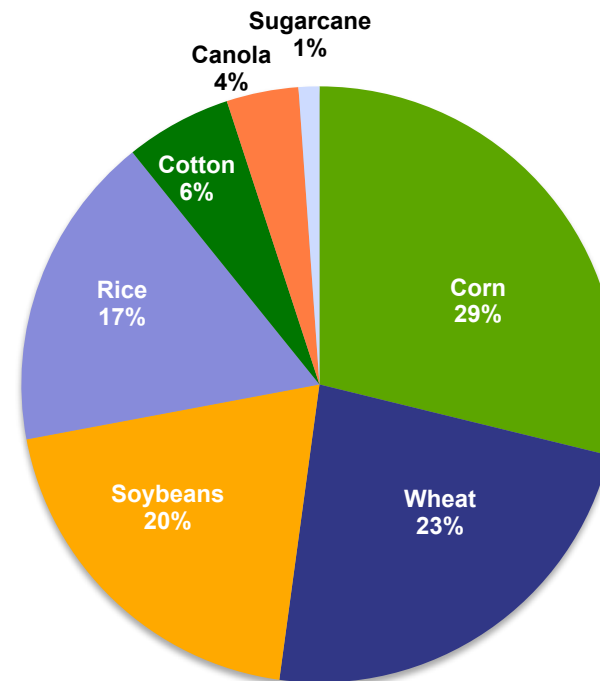
Top four traits represent significant revenue opportunity in major global crops

Annual Trait Revenue Opportunity Approximately \$9B-\$14B¹

By Trait

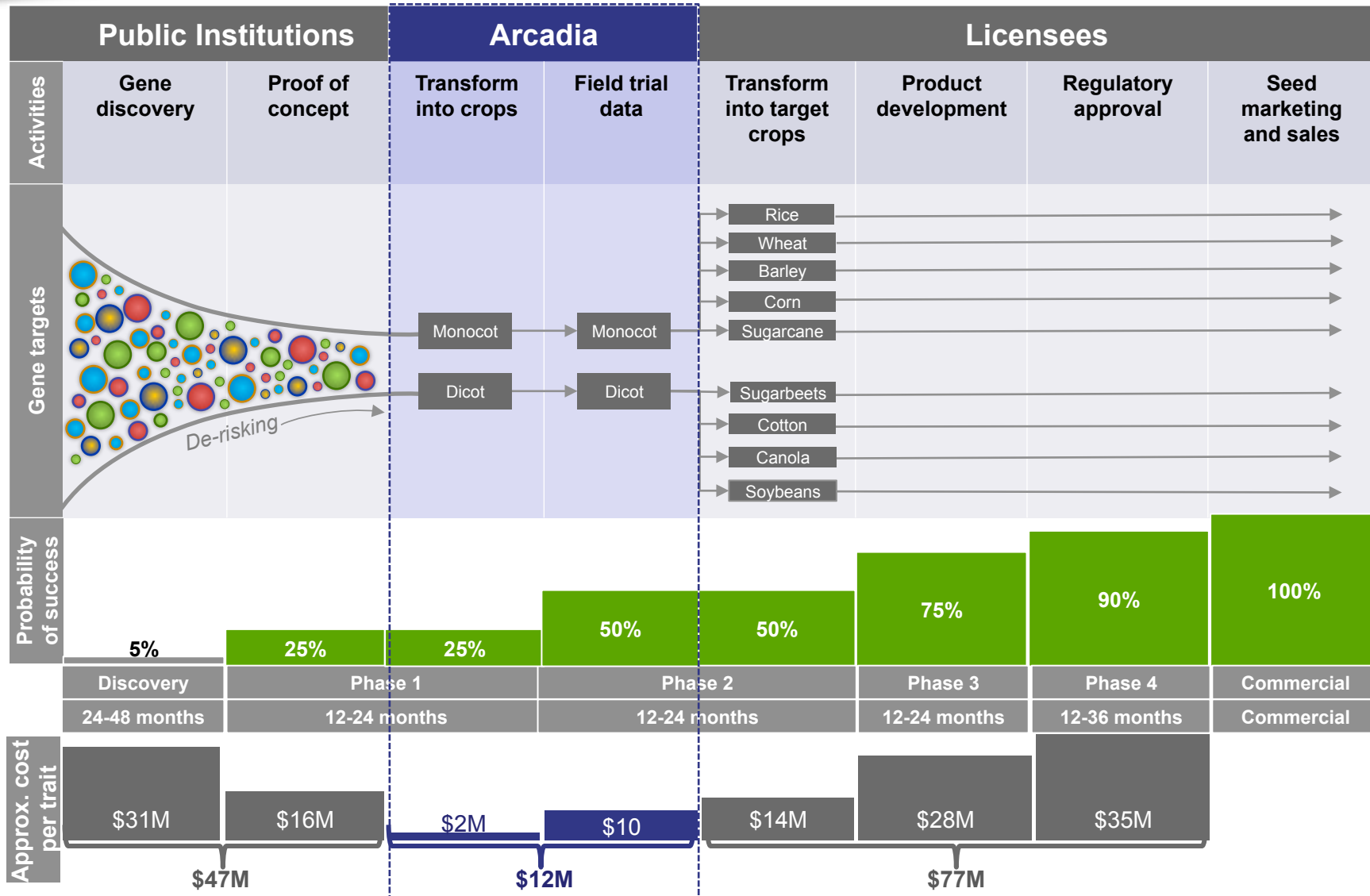


By Crop



¹ Phillips McDougall Analysis, 2015

Open architecture maximizes technology access and global market penetration



Source: Company information, Phillips McDougall, Seed Industry June 2014.

Late-stage portfolio with 13 products in Phase 3 of development or later



| Program | Crop | Collaborator(s) | Phase | D | 1 | 2 | 3 | 4 | C | Key markets |
|--|--------------|---------------------------------|-------------------------------------|-------|-------|-------|-------|-------|---|--------------------------|
| | | | Months | 24-48 | 12-24 | 12-24 | 12-24 | 12-36 | | |
| Productivity traits: Designed to increase crop yields and income through improved input efficiency and environmental stress tolerance | | | | | | | | | | |
| | | | Probability of success ¹ | 5% | 25% | 50% | 75% | 90% | | |
| Nitrogen Use Efficiency (NUE) | Wheat | Limagrain, Mahyco, CSIRO, ACPFG | | | | | | | | Global |
| | Rice | Mahyco, AATF | | | | | | | | Asia |
| | Canola | - | | | | | | | | North America, Asia |
| | Barley | - | | | | | | | | North America, Australia |
| Water Use Efficiency (WUE) and Drought Tolerance (DT) | Soybean (DT) | Verdeca | | | | | | | | Americas, Asia |
| | Wheat (DT) | Bioceres | | | | | | | | Global |
| Salinity Tolerance (ST) | Rice | Mahyco | | | | | | | | Asia |
| Herbicide Tolerance² | Wheat | Confidential | | | | | | | | Global |
| Trait Stacks | | | | | | | | | | |
| NUE/WUE/ST | Rice | AATF | | | | | | | | Asia |
| Product quality traits: Designed to increase the value of harvested products | | | | | | | | | | |
| GLA Oil | Safflower | Abbott | | | | | | | | North America, Asia |
| Resistant Starch² | Wheat | - | | | | | | | | Global |
| Post Harvest Quality² | Tomato | Bioseed | | | | | | | | Asia, North America |
| ARA Oil | Safflower | Abbott, DuPont Pioneer | | | | | | | | North America, Asia |

Note: Phase: D=Discovery; 1=Proof of Concept; 2=Greenhouse / Early Field Trials; 3=Additional Field Trials / Product Development; 4=Regulatory / Pre-Commercial; C=Commercialized

¹ Based on industry standard probabilities

² Non-GM

Stress Tolerant soybeans have received the first regulatory approvals



Stress Tolerance – Soybeans

| DEVELOPMENT PHASE / PROBABILITY OF SUCCESS | | | | | |
|--|----------|----------|----------|----------|---|
| D | 1 | 2 | 3 | 4 | C |
| 24-48 mo | 12-24 mo | 12-24 mo | 12-24 mo | 12-36 mo | |
| 5% | 25% | 50% | 75% | 90% | |

Market Potential

- Global: 110M Ha
- 4th largest global crop
- Focus: North America, South America

Value Creation

- Each 10% yield increase creates ~\$10B added value globally
- Trait share potential: High

Market Channel

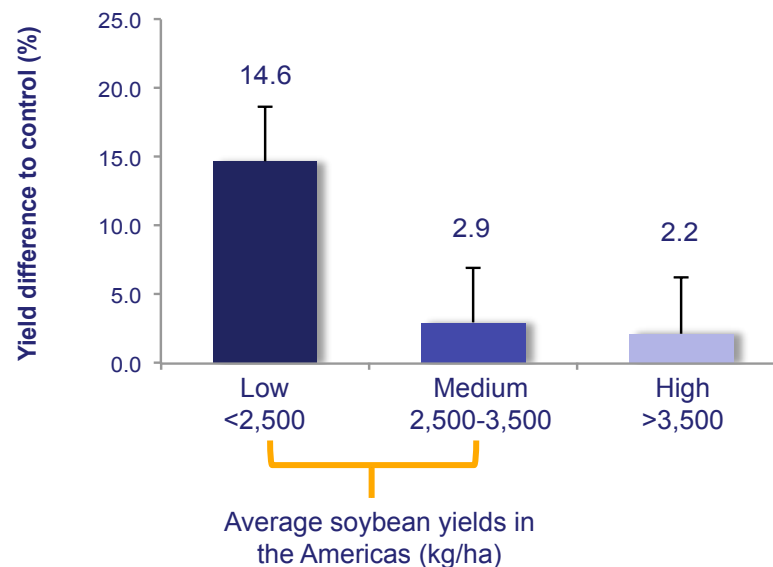
- US-based 50/50 joint venture between Arcadia and Bioceres 
- Stress tolerant soybeans received first regulatory approval in Argentina in April 2015
- US FDA Early Food Safety Evaluation completed for HB4 stress tolerance trait
- Companies representing ~35% of South America soybean sales have access to trait

Stress Tolerant Soybean Field Trials

Data Notes

- Multiple years of field data show yield improvements across different environments
- Yield gains most pronounced in low-yielding environments, where yield gains reached 14-15%

Stress tolerant soybean field trials in different yield environments (average of 28 trials in 2013-2014)



Source: FAO, Company information

NUE rice demonstrates average yield increase of 30%

| Nitrogen Use Efficiency – Rice | | | | | |
|--|----------|----------|----------|----------|---|
| DEVELOPMENT PHASE / PROBABILITY OF SUCCESS | | | | | |
| D | 1 | 2 | 3 | 4 | C |
| 24-48 mo | 12-24 mo | 12-24 mo | 12-24 mo | 12-36 mo | |
| 5% | 25% | 50% | 75% | | |

| Market Potential |
|--|
| <ul style="list-style-type: none"> Global: 162M Ha 3rd largest global crop Focus: Asia |

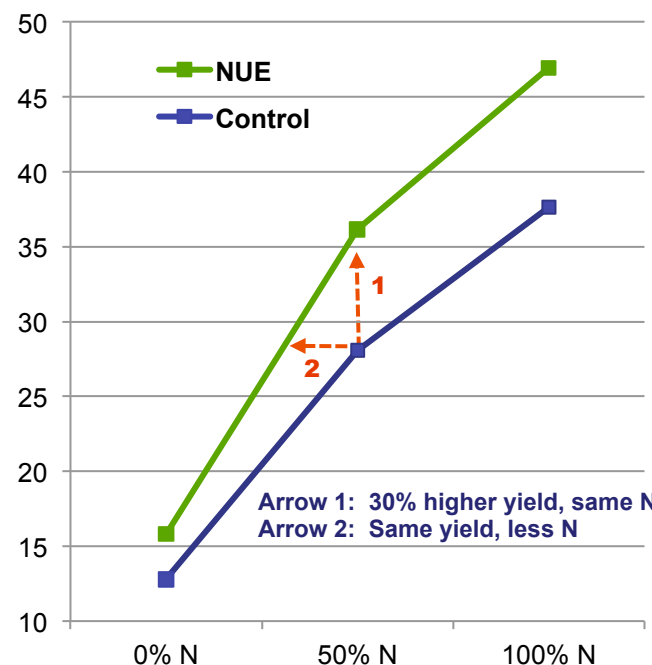
| Value Creation |
|--|
| <ul style="list-style-type: none"> Each 10% yield increase creates ~\$30B added value globally Trait share potential: High |

Market Channel

- Major seed company in India; partially owned by Monsanto
- Key partner since 2007
- Introduced the first GM cotton in India and achieved >90% trait market share
- NUE trait has completed US FDA Early Food Safety Evaluation



NUE Rice Field Trials



| Production Environment | N Rate (% normal) | NUE Rice Mean (% yield increase) |
|------------------------|-------------------|----------------------------------|
| Lowland | 0% | 25% |
| | 50% | 26% |
| | 100% | 25% |
| Upland | 17% | 43% |
| | 50% | 32% |
| Mean | | 30% |

Based on 4 years of field trials by the International Center for Tropical Agriculture (CIAT)

Data Notes

- Independent field testing demonstrated average yield increase of 30% based on 4 years and multiple environments
- Rice lines incorporating the NUE trait have shown double-digit percentage increases in key plant performance and yield metrics

Source: FAO, CIAT, Company information

Non-GM Herbicide Tolerant wheat taps into largest existing trait market

| Herbicide Tolerance – Wheat (non-GM) | | | | | |
|--|----------|----------|----------|----------|---|
| DEVELOPMENT PHASE / PROBABILITY OF SUCCESS | | | | | |
| D | 1 | 2 | 3 | 4 | C |
| 24-48 mo | 12-24 mo | 12-24 mo | 12-24 mo | 12-36 mo | |
| 5% | 25% | 50% | 75% | | |

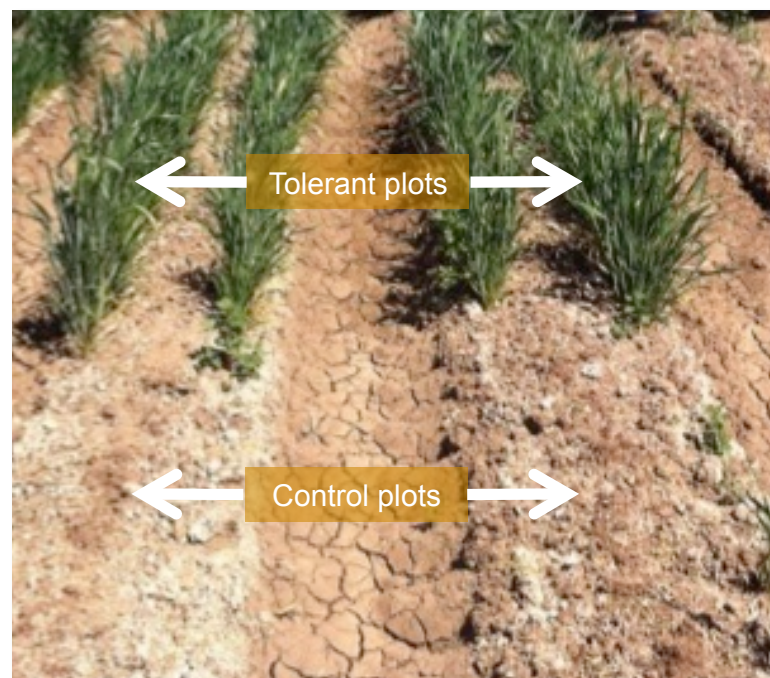
| Market Potential |
|--|
| <ul style="list-style-type: none"> Global: 217M Ha Largest global crop |

| Value Creation |
|--|
| <ul style="list-style-type: none"> Based on combination of herbicide cost reduction and yield increase Trait share potential: High |

- ### Market Channel
- Key collaborator and funding partner is major seed company, who has non-exclusive, geographically limited rights
 - Broad non-exclusive licenses in additional geographies planned

- ### Data Notes
- High-throughput screening of proprietary genetic diversity library used to discover and stack genes
 - Optimized genetic stack in greenhouse and field tests
 - Testing to date demonstrates clear tolerance to glyphosate herbicide in multiple lines

Herbicide Tolerant Wheat Field Trials



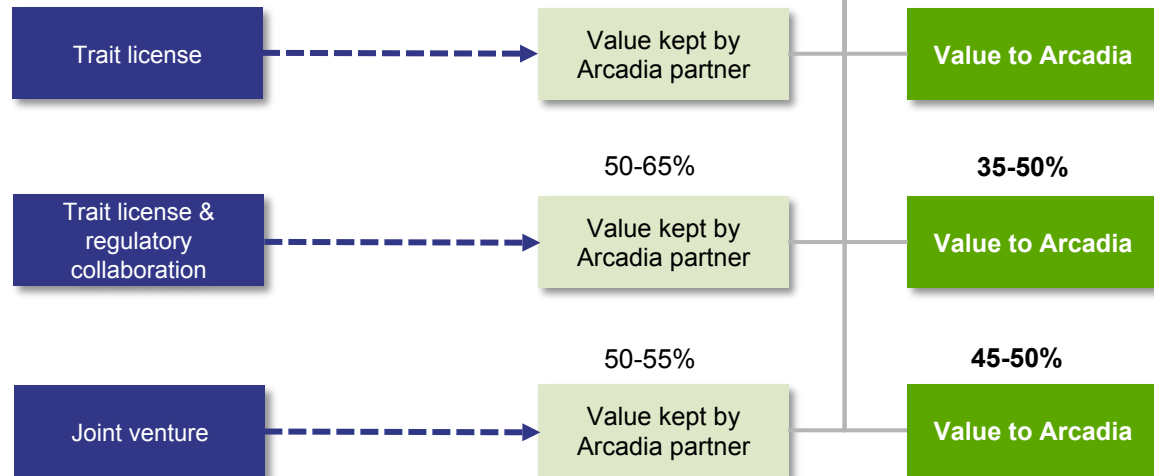
Source: FAO, Company information

Traits and capabilities lead to high value-capture

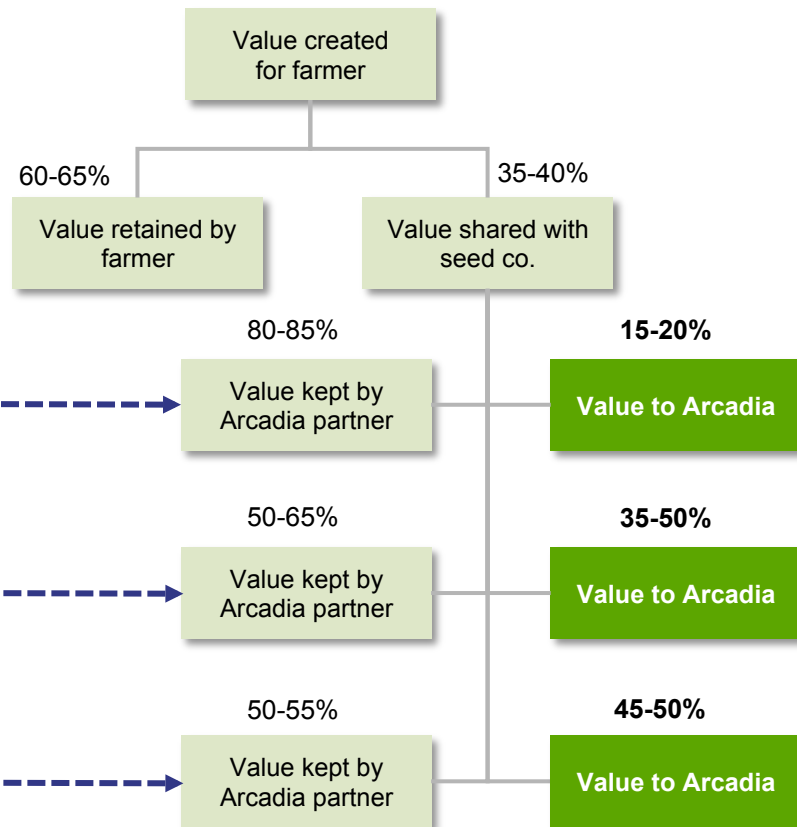
Arcadia has licensed key technologies to partners for most major crops and countries

- Farmer – seed company value allocation based on partner experience
- Arcadia value allocation established by contract

Three primary license types:



Value-sharing



Regulatory approvals and commercial partnerships continue to advance pipeline

Regulatory advancements



Regulatory approval of stress tolerant soybeans by CONABIA in Argentina



US FDA Early Food Safety Evaluation for NUE trait in all crops



US FDA approval of GLA safflower oilseed meal in animal feed



US FDA Early Food Safety Evaluation for HB4 trait in all crops

Commercial advancements



Verdeca collaboration with TMG to advance breeding of stress tolerant soybeans in South America



Verdeca collaboration with Dow AgroSciences to advance yield traits in soybeans in South America



Phytola research partnership to develop soybean varieties with increased oil content



Verdeca collaboration with TMG to develop non-GM agronomic and quality traits in soybeans

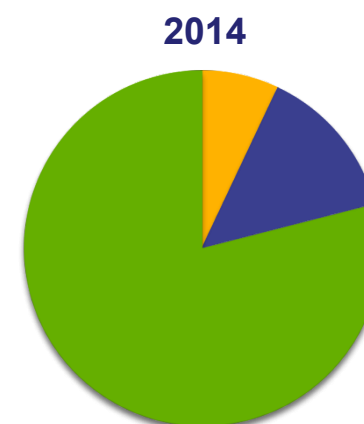
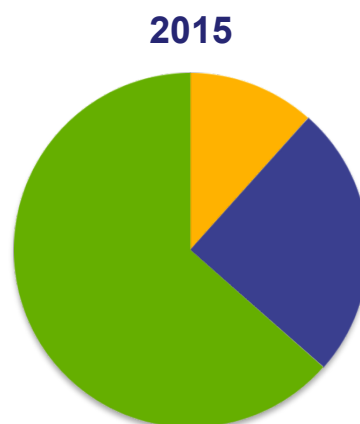
Revenue

| | Second Quarter | | | First Half | | |
|---|----------------|--------------|---------------------------|--------------|--------------|---------------------------|
| | 2015 | 2014 | % Increase/ (Decrease) | 2015 | 2014 | % Increase/ (Decrease) |
| Product revenue | 179 | 65 | 175% | 260 | 199 | 31% |
| License revenue | 401 | 195 | 106% | 559 | 371 | 51% |
| Contract research and governmental grants | 850 | 1,045 | (19%) | 1,426 | 2,112 | (32%) |
| Total revenues | 1,430 | 1,305 | 10% | 2,245 | 2,682 | (16%) |

\$K; Unaudited

First-half revenue mix comparison:

- Product revenue
- License revenue
- Contract research and government grants



Operating expenses

| | Second Quarter | | | First Half | | |
|---------------------------------|----------------|--------------|---------------------------|--------------|---------------|---------------------------|
| | 2015 | 2014 | % Increase/ (Decrease) | 2015 | 2014 | % Increase/ (Decrease) |
| Cost of product revenues | 106 | 46 | 130% | 162 | 137 | 18% |
| R&D expense | 2,086 | 2,275 | (8%) | 3,918 | 4,258 | (8%) |
| SG&A expense | 2,785 | 3,983 | (30%) | 5,423 | 5,867 | (8%) |
| Total operating expenses | 4,977 | 6,304 | (21%) | 9,503 | 10,262 | (7%) |

\$K; Unaudited

First-half expense mix comparison:

- Cost of product revenues
- R&D expense
- SG&A expense

