

A horizontal band showing a sunset over a field. The sun is low on the horizon, casting a warm orange glow across the sky and the field. The field appears to be a crop field, possibly corn or soybeans, with a line of trees in the background.

Investor Presentation

September 2020

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 regarding these and other factors that could affect the company’s financial results is included in filings the company makes with the Securities and Exchange Commission from time to time, including the section entitled “Risk Factors” in the company’s Annual Report on Form 10-K for the year ended December 31, 2019. 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 and in the attachments is as of the date hereof, and Arcadia Biosciences, Inc. undertakes no duty to update this information.

Arcadia Biosciences innovations meet a wide variety of health, nutrition and performance needs globally



IMPROVE

- Shelf life
- Dietary fiber
- Oil quality
- Nutrient profile
- Plant proteins
- Flavor and color



REDUCE

- Allergenicity
- Calories
- Added fibers and sugars
- Crop variability
- Environmental impact



MANAGE

- Yield and quality
- Drought tolerance
- Herbicide tolerance
- Plant resilience
- Growth cycle



Key crop & ingredient traits

Leading Traits

Wheat

- High-fiber resistant starch
- Reduced gluten
- Extended shelf-life

Hemp

- Yield and quality
- Plant resilience
- Growth cycle

Soy

- Drought tolerance
- Herbicide tolerance



Using our technology platform
and proprietary libraries
Building on over 15 years
of industry expertise





B2C

B2B

Channel Strategy

- **Domestic:** National grocery chain & Amazon digital food stores



- **International:** Leveraging proven digital platforms, Key Opinion Leader (KOL) model and classic network of local food service and retail

- Globally: Partner with large, innovative millers and CPG's who recognize the premium value of GW



- Channel partners develop formulations and marketing strategies as best fit for their target markets



Supply Chain

- Arcadia sources IDP grain in US
- Arcadia manufactures finished goods
 - Flour, pasta, cake mixes, crackers, etc.



- Today Arcadia sources IDP grain
- Will migrate IDP production local to channel partner over time (elevators)



Value Capture

- Arcadia sells finished goods at wholesale pricing to channel partners
- Arcadia sells at MSRP through direct on-line



- Currently Arcadia sells grain to channel partners to formulate
- Migrate to trait model once production established locally to channel partner



Brand Strategy

- Master brand powered by GoodWheat; subordinate brands as example Three Farm Daughters



- Master brand powered by GoodWheat
- Private brand and White label





B2C overview – Three Farm Daughters (USA)

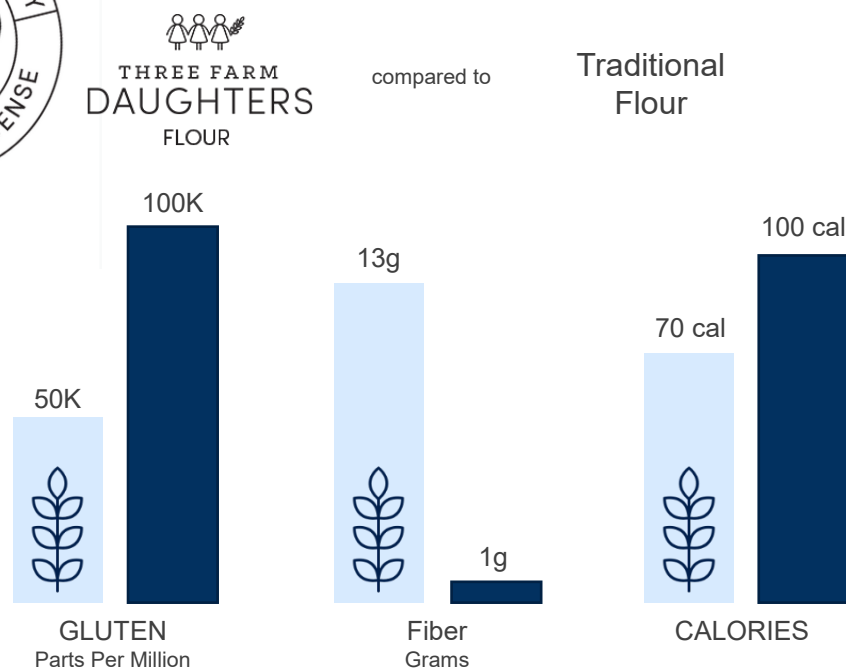


AMAZON / REGIONAL GROCIER

- Penetrating the US market in both e-commerce channels and beginning with Regional Grocery chains in the Mid-west
- JV Partnership with large family farm operations in Grand Forks, ND, Sproule Farms



HOW WE'RE DIFFERENT



in a quarter of a cup serving

Flour Traditional Flour



BETTER FOR YOU FOOD

- HIGH FIBER
- 50% LESS GLUTEN
- 30% LESS CALORIES
- PROUDLY USA MADE

No fillers. No dyes. No lies.



B2C overview – Tmall & Tastemade (Int'l)



Shopping on Tmall has become a way of life for Chinese people

- Largest monthly active user platform in China
- Leading driver in lower tier cities penetration
- Supporting brands entering into new markets
- Supporting brands digitalization

Tmall Food Users Growing Rapidly, Especially Young Users

- New users numbers at 45% vs. last year
- Users born after 90s represent 51% of users
- Users born after 00s growing at 200% vs. last year

- 2019 fresh e-commerce penetration is 16% of the total market, ~RMB 322bn
- Key breakthroughs in logistics & warehousing has decreased overheads
- Increasing standardizing of the market enables brand building and consumer marketing
- Fresh businesses in midst of digital transformation; there will be winners & losers in this new market



7bn+
monthly active
users



Sourcing from
1,000
locations



200
cities covered



GoodWheat indicative revenues



B2C

UNITS SOLD	ANNUAL PRODUCT REVENUE
500K	\$4.0M
1,000K	\$8.0M
1,500K	\$12.0M

ASSUMPTIONS

Units are consumer sku's with avg. WS price \$8/pack –



B2B

UNITS SOLD	ANNUAL GRAIN REVENUE
200K	\$2.0M
400K	\$4.0M
600K	\$6.0M

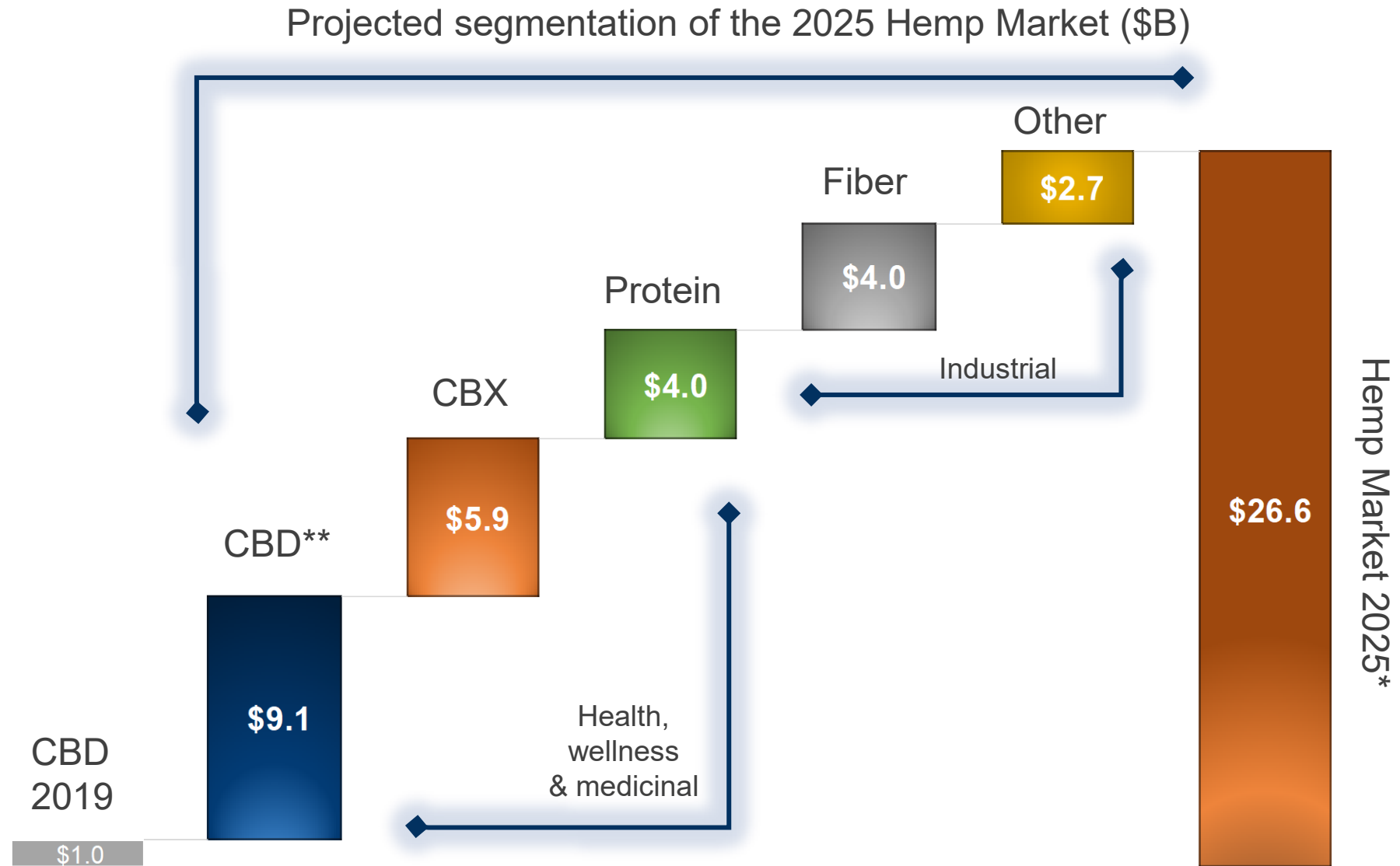
ASSUMPTIONS

Units are bushels of GoodWheat; pricing/bu ~\$10 –





Global hemp market by 2025





Nascent hemp industry offers significant market potential

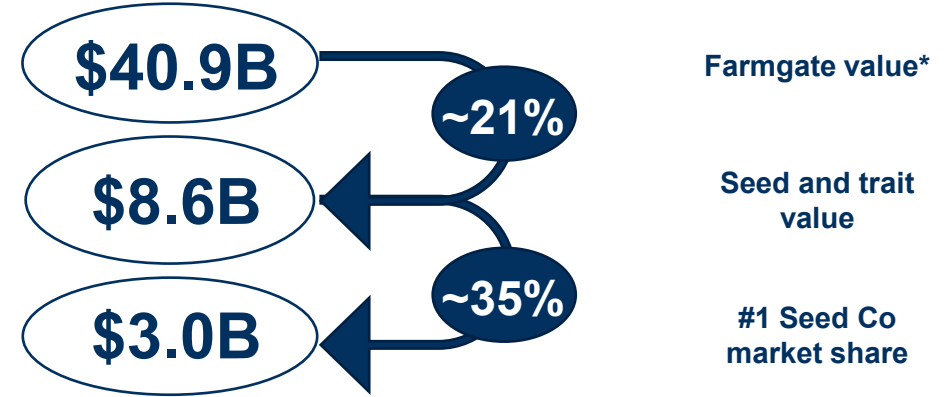
Represents massive new genetic improvement opportunity



US Hemp industry ready for professionalism

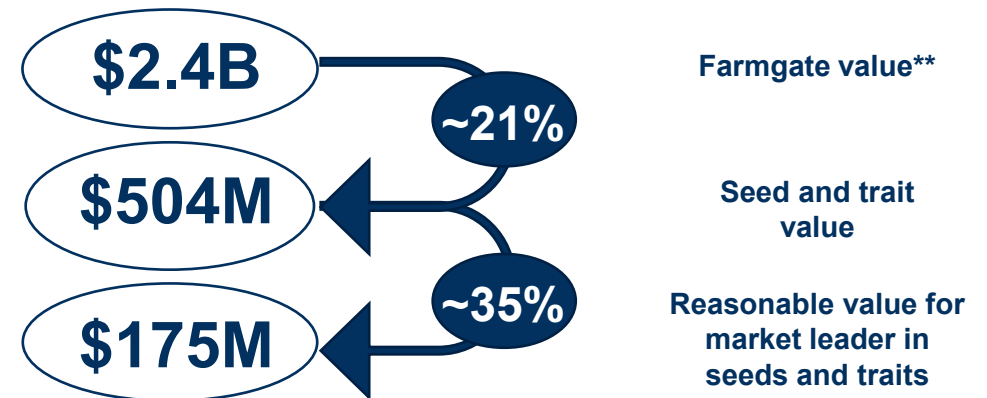
- The 2014 then 2018 Farm Bills that generally de-scheduled hemp and hemp-derived products from the Controlled Substance Act & legalization (pending final USDA regulations) has led to a boom in the industry
- However, despite its large and rapidly growing market size, the US hemp industry remains in the nascent stages of its development
- As a result, many industry players and companies do not reach the standards required in mature industries:
 - Management teams lack professionalism and institutionalized processes
 - Lack of transparency in reporting and compliance oversight
 - Multi-national CPGs require supply chain reliability and transparency rarely available in the market today
 - Wide range of product quality at every stage (from seeds to biomass to extraction to final product) as the industry has yet to fully settle and force out bad actors
- Early stage of research in AgroSciences and CBD due to previous restrictions, creates environment ripe for rapid advancements in genetics, processing and other hemp-science related products
 - Intellectual property in this crop is still immature, but a race to a defensible position lies ahead

Soy global market; proxy for hemp

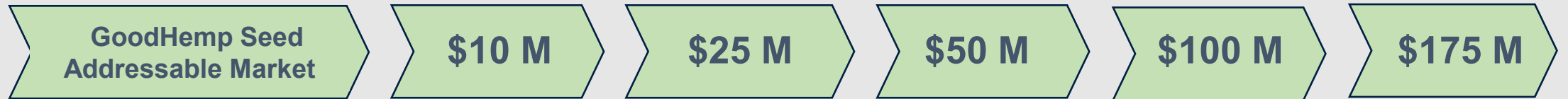


*9% of total 2018 global retail value of soy value

Estimated Global Hemp Addressable Market :



**9% of total \$26.6B estimated global hemp retail value in 2025



ACRES SOLD	% OF ACRES SOLD	ANNUAL SEED REVENUE
2,000	1.5%	\$4.0M
4,000	3.0%	\$8.0M
6,000	4.5%	\$12.0M

ASSUMPTIONS
~\$2K PER ACRE -
130K ACRES HARVESTED IN 2021 -

INDICATE REVENUES

Farm Upsells
Seed Services
Agronomy
Biomass Sales

Extract Upsells
Quality





Archipelago Ventures — *Hawaiian Premium CBD*



- Venture joins Arcadia's extensive genetic expertise and resources with Legacy Venture's proven experience in extraction and distribution.
 - Former Gold Glove and World Champion Major League Baseball player Shane Victorino is a Legacy Venture principal, along with other native islanders committed to building Hawaii's capacity to supply branded health and wellness goods.
- JV creates one vertically integrated supply chain, from seed to sale, to deliver superior hemp-derived CBD products.
 - Partnership leverages Hawaii's unique geographic and climate advantages for growing hemp year-round and provides access to key international markets.
 - First sales of superior hemp extract are expected in late 2020, in line with regulatory guidelines.
- Vivion Specialties, Inc. (VSI), a North American specialty ingredient supplier with a network of 18 sales regions in the U.S. and Canada, serves as Archipelago's North American distributor, managing the stateside marketing and sales of sun-grown Hawaiian hemp ingredients in key markets like food and beverage, human and pet nutrition and personal care.
 - VSI is known for its proprietary VivAssure® purity validation process, validating that they are free of over 950 pesticides and contaminants, 24 heavy metals and a variety of microbial organisms, and contain the precise tetrahydrocannabinol (THC) content and CBD profile listed



INDICATE REVENUES

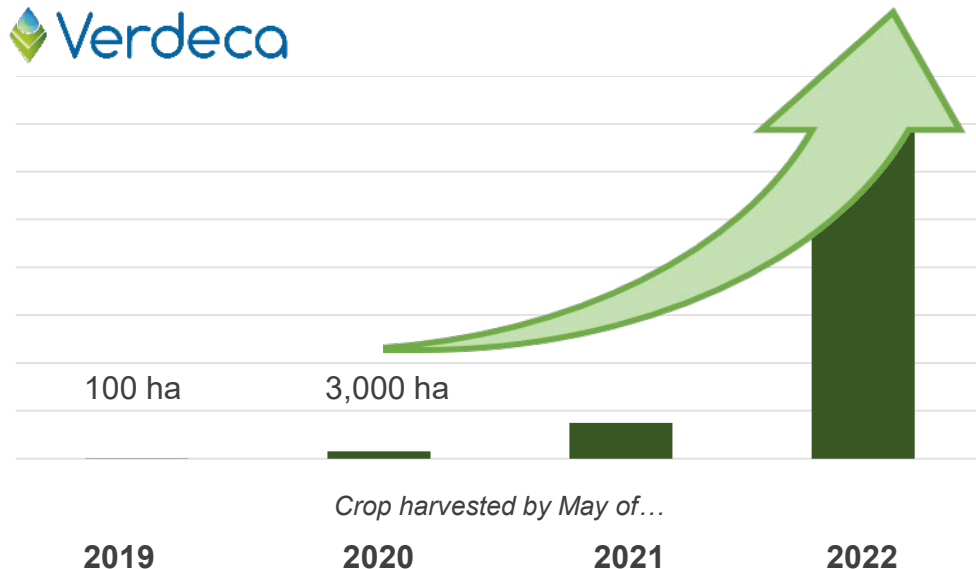
ACRE HARVESTS	ANNUAL CBD REVENUE
30	\$1.8M
75	\$4.5M
150	\$9.0M
<u>ASSUMPTIONS</u> \$2.3K PER PER KILO [DISTILLATE] - 26 KILO'S OF CBD PER ACRE -	



HB4
SOYBEAN

HB4 drought and herbicide tolerant soybeans approved in > 80% of global soybean acres

- Developed through Verdeca joint venture with Bioceres
- HB4 and herbicide tolerant trait stack approved in all major soybean producing countries
- Third season of breeding trials completed
- USDA Approval in August 2019
- First sales of seed expected in 2021, pending import approval in China

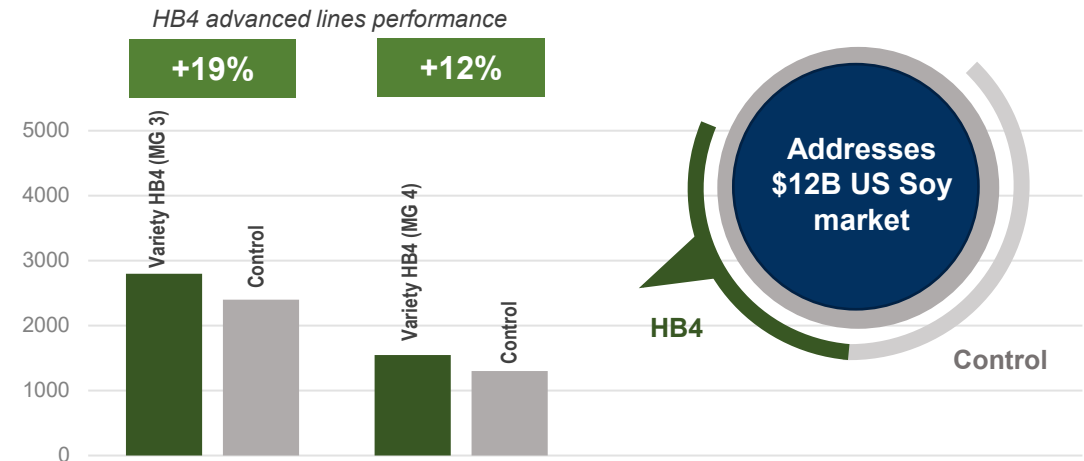


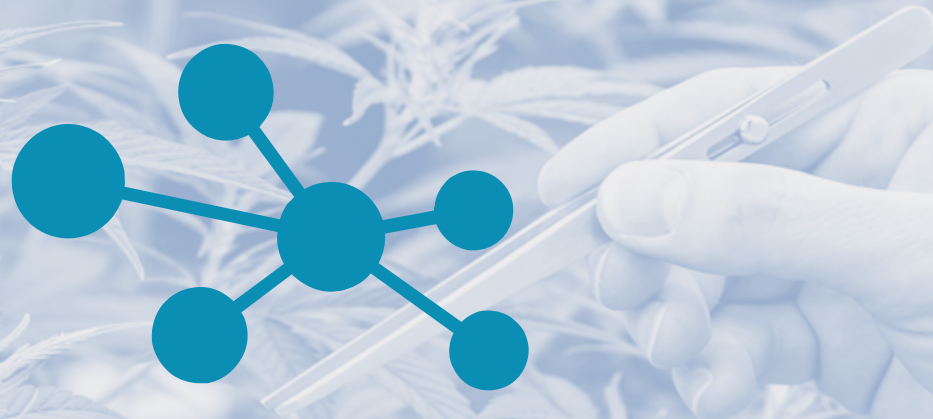
HB4[®] Regulatory Status

Country	FOOD & FEED		PRODUCTION	
	Submission Year	Approval Year	Submission Year	Approval Year
Argentina	2014	2015	2014	2015
Uruguay	2015	-	2015	-
Brazil	2018	2019	2018	2019
Bolivia	2018	-	2019	-
Paraguay	2018	2019	2018	2019
USA	2016	2017	2016	2019
Canada	2018	-	2018	-
China	2016	-	-	-
India	2019	-	-	-

HB4 Soybean Performance

The performance of the trait in converted varieties is showing significant benefits, particularly on these low yielding production areas in Argentina

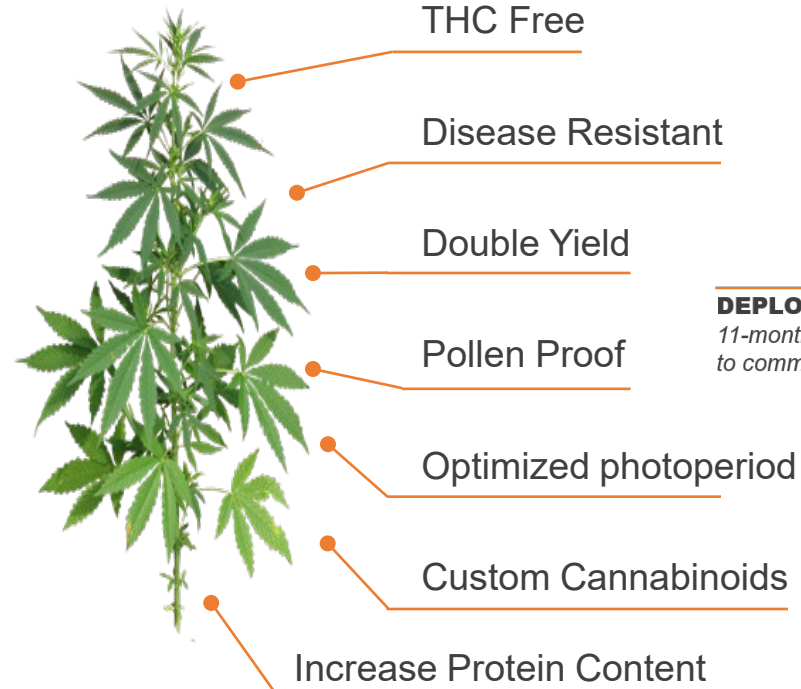




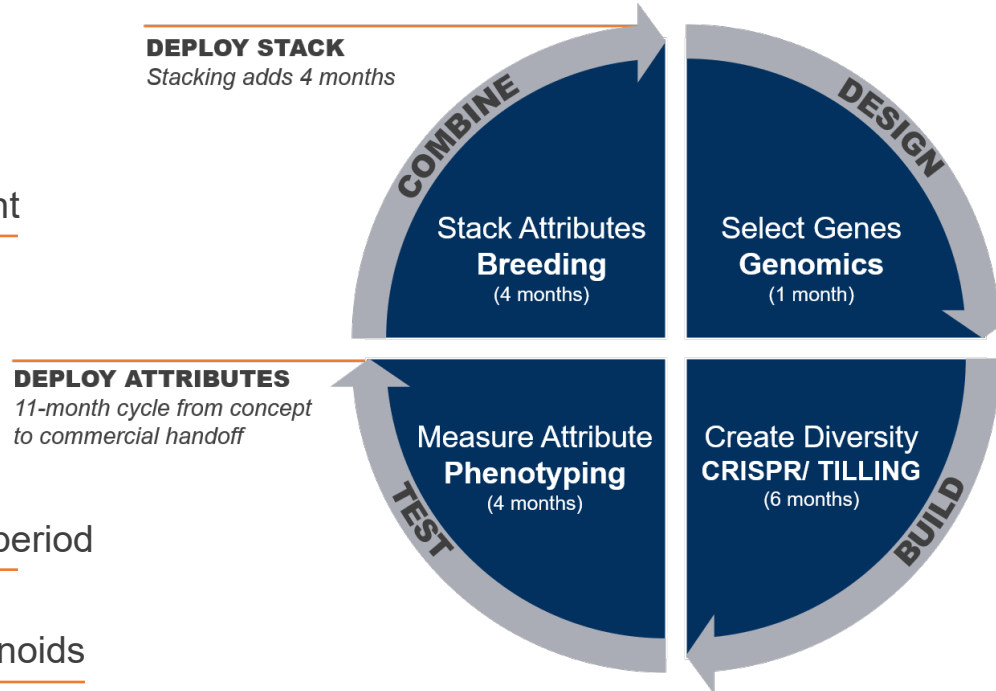
ARCATECH

TECHNOLOGY PLATFORM

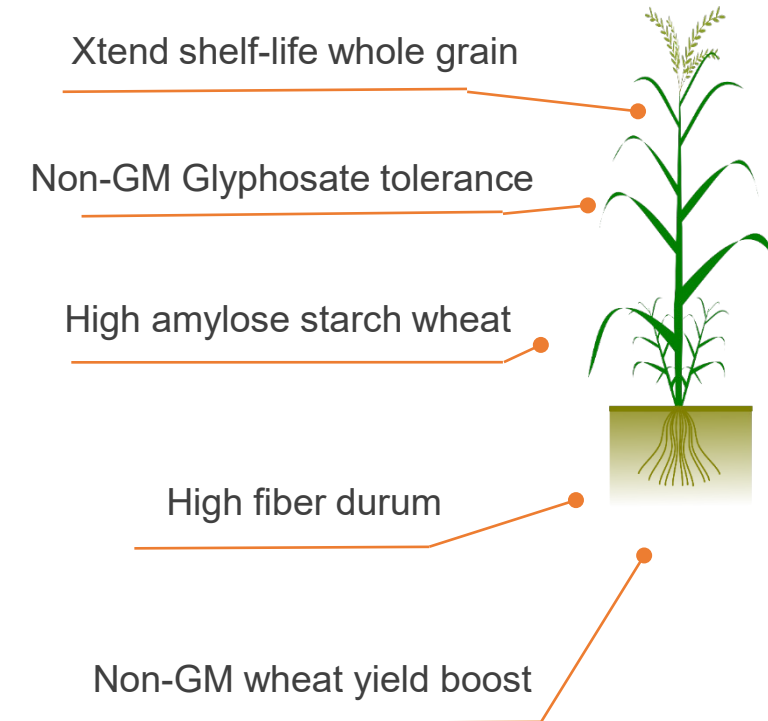
HEMP



ArcaTech Platform Innovation Cycle

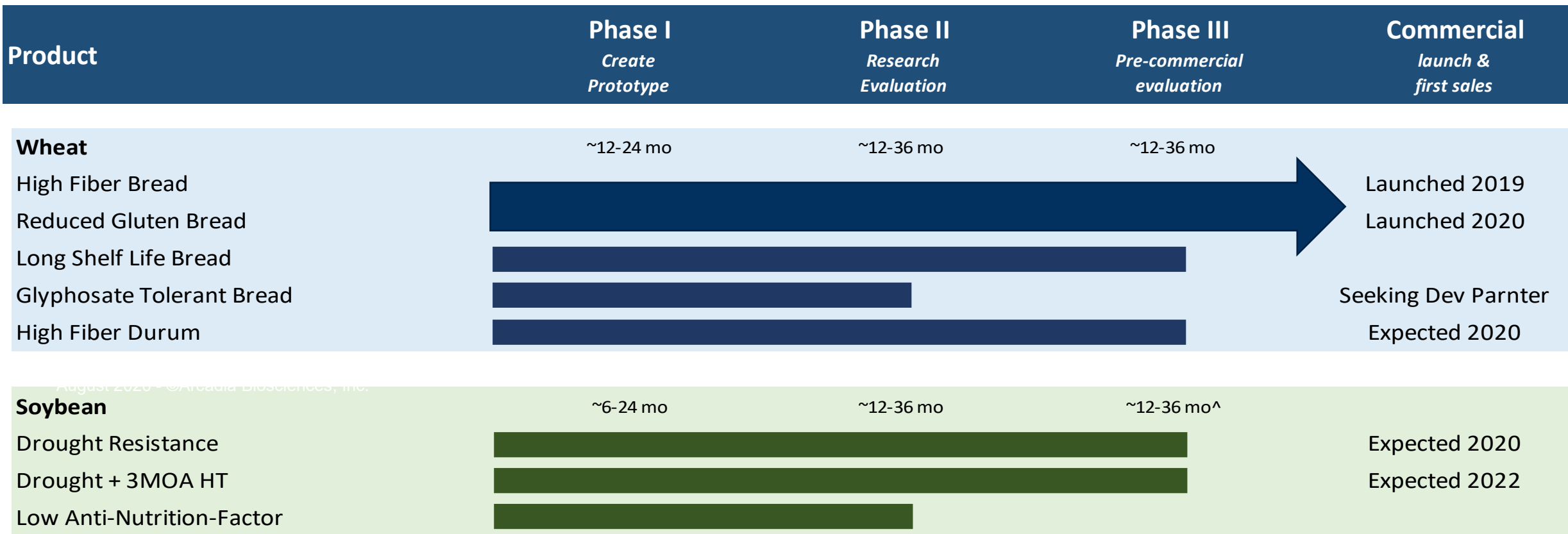


WHEAT



ArcaTech combines Arcadia's modern breeding science and genomics technology with real-time market intelligence from the field.

Product		Phase I <i>Create Prototype</i>	Phase II <i>Research Evaluation</i>	Phase III <i>Pre-commercial evaluation</i>	Commercial <i>launch & first sales</i>
Hemp		~6-12 mo	~4-12 mo	~4-12 mo	
Wellness	High CBG				Expected 2021
	Short Season Autoflower				Expected 2021
	Tropical Adapted Photoperiod				Expected 2022
	Powdery Mildew Resistance				Expected 2022
	High Yield CBD (20% Increase)				Expected 2023
	Pollen Proof/Seedless				Expected 2023
Grain & Industrial	Dual Crop Broad Acre (Fiber&CBD)				Expected 2022
	Drought Tolerance				Expected 2022
	High Grain Yield (20% increase)				Expected 2023
	Disease Resistance (mildew & botrytis)				Expected 2023



[^] GM attributes may increase time to commercialization

Wheat and soybean pipeline presents robust value creation opportunities in mature crop markets

Technology platform protection

- Method patent pending on proprietary hemp genome editing platform
- Five new technology patent family filings planned for 2020
- Proprietary know-how and trade secret methodology for TILLING, gene editing and accelerated breeding

Crops & traits protection

- Strategy protects product by technology, trait and geography
- Own or exclusively control 210 patents worldwide
- 59 issued patents and an additional 54 filed since 2015
- Controls patents in key production markets globally for core crops
- Unique ability to obtain powerful utility patents to protect non-GM traits

Investment and financial highlights

Poised for significant shareholder value creation

- Hemp genetics opportunity >\$175M in enterprise value by 2025
- New hemp derivative products in 2020 and beyond
- Wheat business now commercialized
- Soy trait scaling up acreage in 2020/2021
- CBD supply chain verticalization; accelerant to organic growth

Financial metrics	June 30, 2020
Cash	\$19.8M*
Debt	\$2.1M**
Shares O/S	10.6M*
Warrants and options O/S	5.5M
Value of cash warrants	~\$28M*
NOL carryforward <i>Tax affected, subject to valuation</i>	~\$13M

RKDA Analyst Price Targets			
Bank	Rating	Price	Impl. Value (\$M)
NCS	Buy	\$16.00	\$170
HCW	Buy	\$12.00	\$127
Zacks	Buy	\$11.00	\$117