Evogene’s Ag-Biologicals Division
Microbiome driving crop productivity

Introduction

Ido Dor, EVP & GM, Ag-Biologicals
Jan 2018
Safe Harbor Statement

This presentation contains "forward-looking statements" relating to future events, and we may from time to time make other statements, regarding our outlook or expectations for future financial or operating results and/or other matters regarding or affecting Evogene Ltd. or its subsidiaries (collectively, “Evogene” or “we”), that are considered “forward-looking statements” as defined in the U.S. Private Securities Litigation Reform Act of 1995 (the “PSLRA”). Such forward-looking statements may be identified by the use of such words as “believe,” “expect,” “anticipate,” “should,” “planned,” “estimated,” “intend” and “potential” or words of similar meaning. For these statements, Evogene claims the protection of the safe harbor for forward-looking statements contained in the PSLRA.

Such statements are based on current expectations, estimates, projections and assumptions, describe opinions about future events, involve certain risks and uncertainties which are difficult to predict and are not guarantees of future performance. Therefore, actual future results, performance or achievements, and trends in the future of Evogene may differ materially from what is expressed or implied by such forward-looking statements due to a variety of factors, many of which are beyond Evogene's control, including, without limitation, those described in greater detail in our Periodical and Annual Reports, including our Registration Statement on Form F-1, Annual Report on Form 20-F and in other information we file and furnish with the Israel Securities Authority and the U.S. Securities and Exchange Commission, including under the heading “Risk Factors.”

All written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the previous statements. Except for any obligations to disclose information as required by applicable securities laws, Evogene disclaims any obligation or commitment to update any information contained in this presentation or to publicly release the results of any revisions to any statements that may be made to reflect future events or developments or changes in expectations, estimates, projections and assumptions.

The information contained herein does not constitute a prospectus or other offering document, nor does it constitute or form part of any invitation or offer to sell, or any solicitation of any invitation or offer to purchase or subscribe for, any securities of Evogene or any other entity, nor shall the information or any part of it or the fact of its distribution form the basis of, or be relied on in connection with, any action, contract, commitment or relating thereto or to the securities of Evogene.

The trademarks included herein are the property of the owners thereof and are used for reference purposes only. Such use should not be construed as an endorsement of the products or services of Evogene.
AGENDA

‘Evogene Inside’ – introduction to Evogene

Evogene’s Ag-Biologicals Division

Summary
<table>
<thead>
<tr>
<th>We develop novel products for life-science markets...</th>
<th>...through the use of a unique computational predictive biology platform</th>
</tr>
</thead>
</table>

[Image of plant and computational biology model]
Evogene at a Glance

- **Computational Predictive Biology (CPB) Platform** - applied to identify:
  - Genetic elements for improved seeds
  - Chemical compounds for innovative Ag-Chemicals
  - Microbes for novel Ag-Biologicals

- **Strategic collaborations with world-leading agriculture companies** - including BASF, DuPont, Monsanto, Syngenta, ICL

- **Revenue model** - based on licensing agreements, which typically include three main revenue streams:
  - R&D payments - short term
  - Milestone payments - mid term
  - Royalties from product sales - longer term

- **Subsidiaries** -
  - Evofuel (100%) - Castor Seeds
  - Biomica (90%) - Human Microbiome

- **Financial fundamentals** -
  - Cash position - $76 million (September 30th, 2017), no debt
  - Listed on TASE (2007) and NASDAQ (2013)
Computational Predictive Biology (CPB) Platform

Science: unique multidisciplinary scientific approach

Analysis platforms using machine learning/AI to identify candidates
- ATHLETE™ Gene discovery
- PointHit™ Chemical discovery
- PlaNetNG Stack discovery
- Gene2Product™ Gene optimization
- PoinTar™ Target discovery
- BiomeMiner™ Toxin discovery

Tailored big data
- Expression
- QTL
- Phenotypic data
- Metabolomics
- Metagenomics
- PPI
- Structure
- Genome

Interconnected data hub
- Predictive analysis validation
- Analysis platforms
- Connected data hub

Driving Innovation ‘Connecting the Dots’
Predictive Analysis and Development System
AGENDA

‘Evogene Inside’ – introduction to Evogene

Evogene’s Ag-Biologicals Division

- Ag-Biologicals Market
  - Vision & Strategy
  - Technology
  - Pipeline & Collaborations

Summary
Industry Challenges & Opportunity

Need for innovation
- Increasing resistance
- Regulation pressure
- Decline in product introductions

Green and Safe
- Awareness, regulations and practices

Time To Market
- Shorter time and lower cost compared to alternatives –
  - Ag Chemicals
  - Ag Biologicals

Ag-Biologicals - a new pillar in agriculture productivity

Seeds & Traits  ~$40B
Ag-Chemicals  ~$50B
Fertilizers  ~$100B
Ag-Biologicals
Ag-Biologicals

Products derived of natural sources

Ag-Biologicals Sources:

- **Plant Extracts**
  - Plant derived chemistry

- **Microbial**
  - e.g. bacteria or fungi

- **Macrobials**
  - Pest natural enemies

---

**Bio-Stimulants**

*Mediating plants’ response to optimize yield potential*

**Bio-Pesticides**

*Support the plant by reducing pest damage to the plant*
Ag Biologicals Market

~$3.2B* in 2015

Rapid growth sector

Fast growing sector with potential to complement Ag-Inputs market

* Source: Phillips McDougall, 2015

Source – 2022 estimation based on integrated information of BCC Research, marketsandmarkets, Agropages and Phillips McDougall
Industry Recognition of the Microbiome Opportunity

Major Ag companies – actively invest in order to build position

Emerging startups – significant investments in recent 2-3 years
The Microbiome Opportunity
Billions of Microbes Matter!

Microbiome is driving crop’s productivity

- In and on the plant
- Below and above ground

Human microbiome understanding

Leveraged to plant microbiome research
AGENDA

‘Evogene Inside’ – introduction to Evogene

**Evogene’s Ag-Biologicals Division**

- Ag-Biologicals Market

**Vision & Strategy**

- Technology
- Pipeline & Collaborations

Summary
Ag-Biologicals Division’s Goal
Increasing crop’s productivity through *productive microbiome*

To introduce environmentally safe and effective microbiome based Ag-Biological products driving crop’s productivity

Addressing Key Challenges

<Addressing key challenges of: efficacy, stability and commercial viability>

<table>
<thead>
<tr>
<th>Efficacy</th>
<th>Stability</th>
<th>Commercial viability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Significant improvement / protection of yield</td>
<td>Consistency across germplasms / geographies</td>
<td>Shelf-life COGS</td>
</tr>
</tbody>
</table>

Position on Value Chain

- Short time to market
- End to end capabilities for product development

Partner
Balance between Row and Specialty crops & direct vs. indirect market access

Balanced product programs: Bio-stimulants and Bio-pesticides

Enabling Fermentation & Formulation technology - driving product stability and efficacy

Leverage of core program for extension into new product types

Cost effective application paths
Position on Value Chain

Model A – Indirect Market Access
- Focus mainly on row crops
- Go-to-market based on partners channel

Model B – Direct Market Access
- Focus mainly on high value specialty crops
- Commercialization through distributors / strategic licensing agreements
AGENDA

‘Evogene Inside’ – introduction to Evogene

Evogene’s Ag-Biologicals Division

- Ag-Biologicals Market
- Vision & Strategy

- Technology
  - Pipeline & Collaborations

Summary
Decoding complex plant - pest - microbiome interaction for the identification of genetic elements with desired features for the development of microbial based products
Utilizing a proprietary *Computational Predictive Biology (CPB) Platform* harnessing the power of genotypic & phenotypic *BIG DATA* through advanced informatics

**Proprietary Interconnected Data Hub**

- Data
- Bio-Validation
- Results

**Informatics-Analysis and Design**

- Predictions
- AI

**Novel Ag-Biologicals Products**
Utilizing a proprietary **Computational Predictive Biology (CPB)** platform harnessing the power of genotypic & phenotypic **BIG DATA** through advanced informatics.
AGENDA

‘Evogene Inside’ – introduction to Evogene

Evogene’s Ag-Biologicals Division

- Ag-Biologicals Market
- Vision & Strategy
- Technology

- Pipeline & Collaborations

Summary
# Ag – Biological Product Portfolio

## Pipeline

<table>
<thead>
<tr>
<th>Bio-Stimulants</th>
<th>Bio-Insecticides</th>
<th>Bio-Fungicides</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> Corn</td>
<td><strong>2</strong> Wheat</td>
<td><strong>6</strong> Fusarium bio-fungicide - Corn</td>
</tr>
<tr>
<td><strong>3</strong> Corn Root Worm</td>
<td><strong>4</strong> Stink-Bug - soy</td>
<td><strong>7</strong> Mildews Bio-Fungicide - grapes</td>
</tr>
<tr>
<td><strong>5</strong> Lepidoptera - specialty</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Products by Category:

- **Bio-Stimulants**
  - Corn
  - Wheat

- **Bio-Insecticides**
  - Corn Root Worm
  - Stink-Bug - soy
  - Lepidoptera - specialty

- **Bio-Fungicides**
  - Fusarium bio-fungicide - Corn
  - Mildews Bio-Fungicide - grapes
Results
Bio-Stimulants examples

10% Yield improvement in field trials (2016, 2017)
Under moderate drought

EVO004
Main ears at harvest

None - inoculated
Main ears at harvest

None - inoculated

EVO004

Stem below ear R2

Ear R3

Stem below ear R2

Ear R3

% Yield improvement in field trials (2016, 2017)
Results

Bio-Stimulants examples

18% yield increase in field (2017)
EVO33394+EVO33393

Under moderate drought

13% yield increase in field (2017)
EVO33394+EVO33402

Under moderate drought
DuPont Pioneer & Evogene Announce Multiyear Research Collaboration for Development of Corn Bio-Stimulant Products
Results
Bio-Insecticides examples (initial Lab, Greenhouse)

Western corn root worm
83% increase in leaf area
50% reduction in insect survival

Fall Army Warm
Leaf disk assay results
Results
Bio-Fungicides examples (Greenhouse)

Fusarium in corn - ~70% reduction in disease severity
AGENDA

‘Evogene Inside’ – introduction to Evogene

Evogene’s Ag-Biologicals Division
Value Creation Roadmap

- **Phase advancement**
  - Bio-Stimulants & Pesticides
  - New collaboration

- **Additional strategic collaboration**
  - Patent grant - strains
  - New product program

- **Early commercialization of Technology**
  - Milestone payment
  - Patent grant - technology

- **Initial revenue from first product**
- Expansion into new territories and product types

2018
2019
2020
2021
| 1 | Ag–Biologicals - fastest growing sector in Agriculture inputs, expected to reach $8B in 2022 |
| 2 | Ag-Biologicals time to market is relatively short due to favorable regulatory landscape |
| 3 | Microbiome is a promising opportunity to drive Ag-Biologicals market’s expansion |
| 4 | Evogene’s Computational Predictive Biology platform (CPB), combining biological understanding and cutting-edge computational technology is key for next generation product development |
| 5 | Initiated in 2015, Evogene already generated valuable product pipelines for bio-stimulants & bio-pesticides is in place – potential 1\textsuperscript{st} product launch in 2021 |
Evogene’s Ag-Biologicals Division

Microbiome driving crop productivity

Introduction

Ido Dor, EVP & GM, Ag-Biologicals
Jan 2018