



SUMITOMO CHEMICAL



INTRODUCTION TO VALENT BIOSCIENCES

D TROALEN. BASEL 09-21-2015

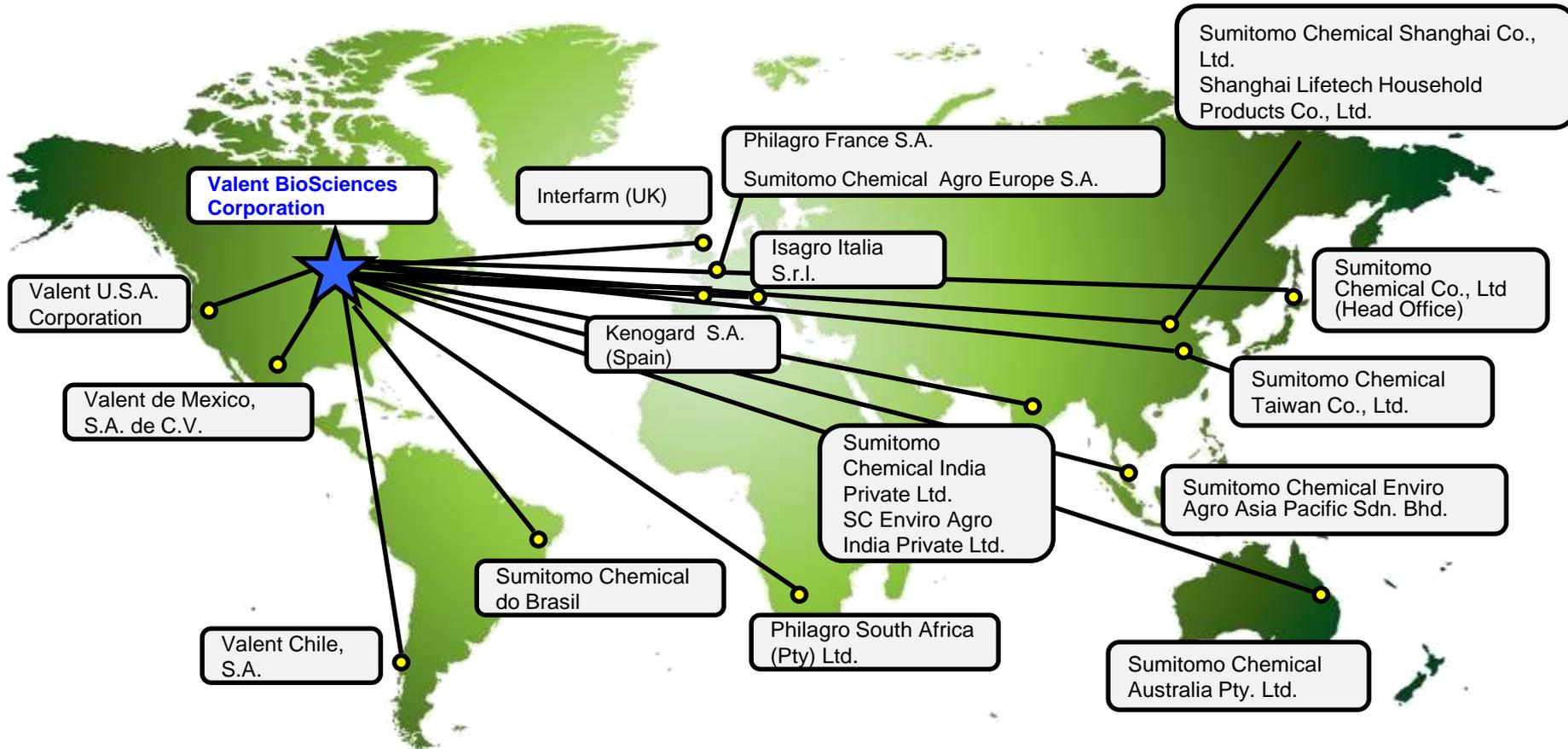


KEY FACTS ABOUT US

- VBC was created in 2000 with the purchase by SUMITOMO CHEMICAL of the Ag product business of Abbot Laboratories
The know-how and the development of PGR's started in 1957
- 800 products registrations in 95 countries in the world : the most extensive portfolio of biorationals in the Ag industry covering
 - Biorational Crop Protection
 - Biorational Crop Enhancement
 - Public health
 - Forestry health
- 135 trademarks
- 725 Sku's
- A global sales network through the Sumitomo Chemical organisation
- A base for the establishment of a Biorational Business Unit within Sumitomo Chemical



VBC MANUFACTURES, FORMULATES & SUPPLIES BRANDED PRODUCTS WORLDWIDE





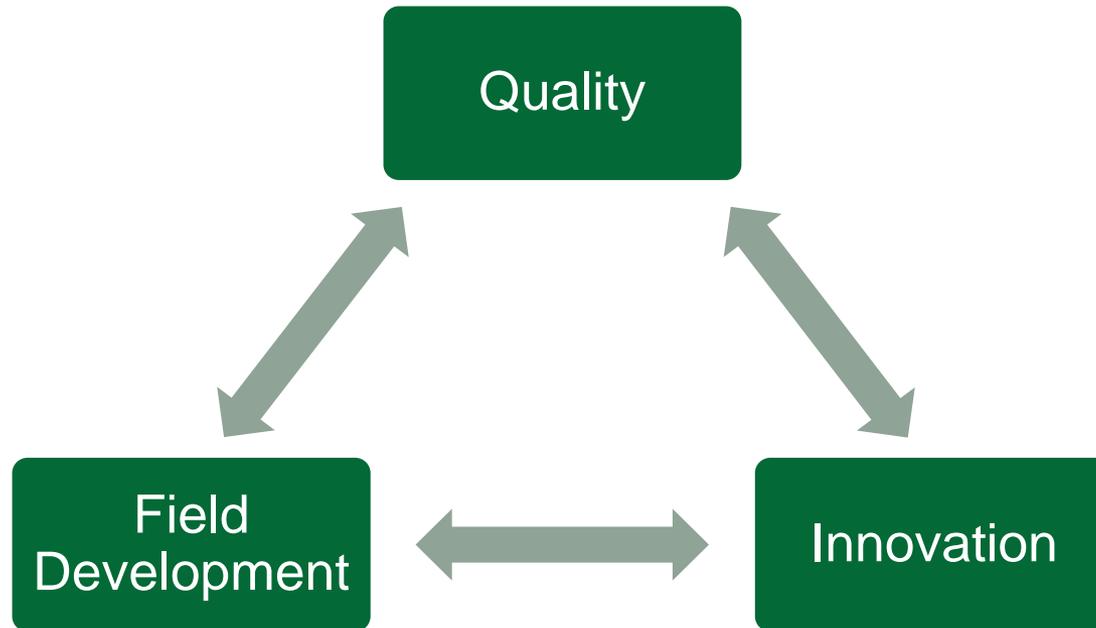
VBC R&D AND RA “SNAPSHOT”

- Long history of Biorational Product Innovation/Development
 - *Bacillus thuringiensis*
 - Plant growth regulators, including:
 - Gibberellins
 - AVG
 - S-ABA
- Basic microbial research
- Fermentation scale-up and optimization
- Innovative formulations that deliver on the promise and commitment
- Field development ...”harnessing” the power of biorationals
- Targeted patent portfolio (approximately 250 patents)
 - 14 US patents issued in FY2013
- >800 product registrations in >90 countries



VBC'S OPERATING STRATEGY FOR INNOVATION

“Quality is not an act, it is a habit”



“Since new developments are the products of a creative mind, we must therefore stimulate and encourage that type of mind in every possible way”

“Innovation is anything but business as usual”



LARGEST BIORATIONAL MANUFACTURING PLANT

Osage Plant

- **State of the art biorational fermentation**
- **Largest capacity in the Ag-microbial industry**
- **Platform for future growth**



- **\$150MM Investment**
- **73 Acre Site in Osage, Iowa**
- **130,000 Square Feet**
- **15 MM Gallon Annual Capacity**
- **89 Employees**

Best Practices from Day One

- **ISO 9001:2008**
- **Lean Six Sigma, Kaizen**
- **GLP, Total Productive Maintenance**
- **Elements of OSHA Process Safety**



VBC IS ALSO IN PUBLIC HEALTH AND FORESTRY HEALTH

- Manufacture best-in-class biorational larvicides for integrated mosquito/vector control programs
 - *Bacillus thuringiensis* var *israelensis* (Bti)
 - *B. sphaericus*
- Publish efficacy results in peer-reviewed literature
- Membership in global health policy organizations



DEVELOPING OUR CROP PROTECTION AND PRODUCTION STRATEGY AROUND THREE TECHNOLOGY PLATFORMS

Seed Seedling

- Physiological seed enhancement
- Root management

In season

- Crop health
- Vigor / Yield enhancement
- Insect management
- Disease management
- Crop stress management

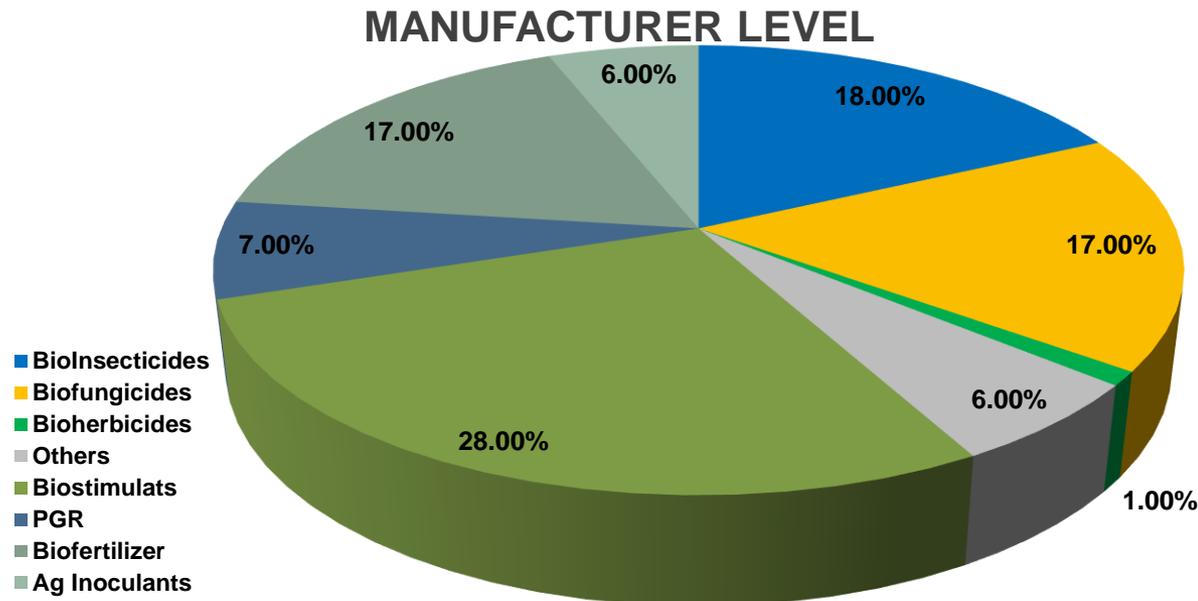
Post harvest

- Disease management
- Quality preservation
- Shelf life extension

BUSINESS AND PRODUCT PORTFOLIO ADDRESS ALL SEGMENTS OF CROP PROTECTION AND PRODUCTION VALUE CHAIN



AG BIORATIONAL MARKET REVENUE 2013 \$ 4.3 BN AND PROJECTED TO CONTINUE GROWING

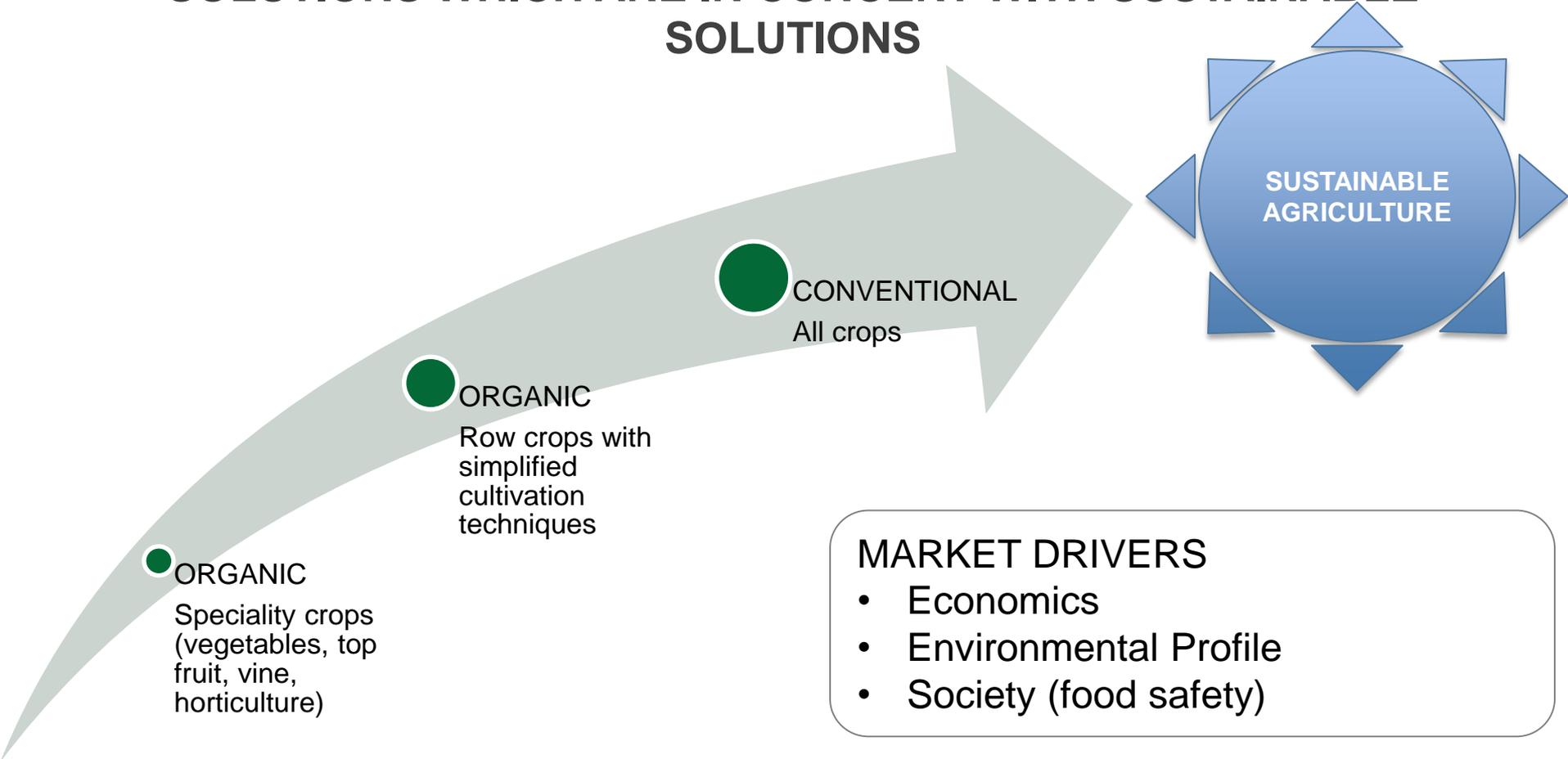


- Biorational Market 2013 include Biostimulants (\$1.2 Bn) and PGR segment where VBC has product offers (\$0.3bn)
- Growth rates as well as more safe and effective alternatives for traditional pesticides and plant health-yield promoters encourages new players to invest on this segment

Source: MarketsandMarkets report



MARKETPLACE IS CHANGING TO ASKING FOR SOLUTIONS WHICH ARE IN CONCERT WITH SUSTAINABLE SOLUTIONS





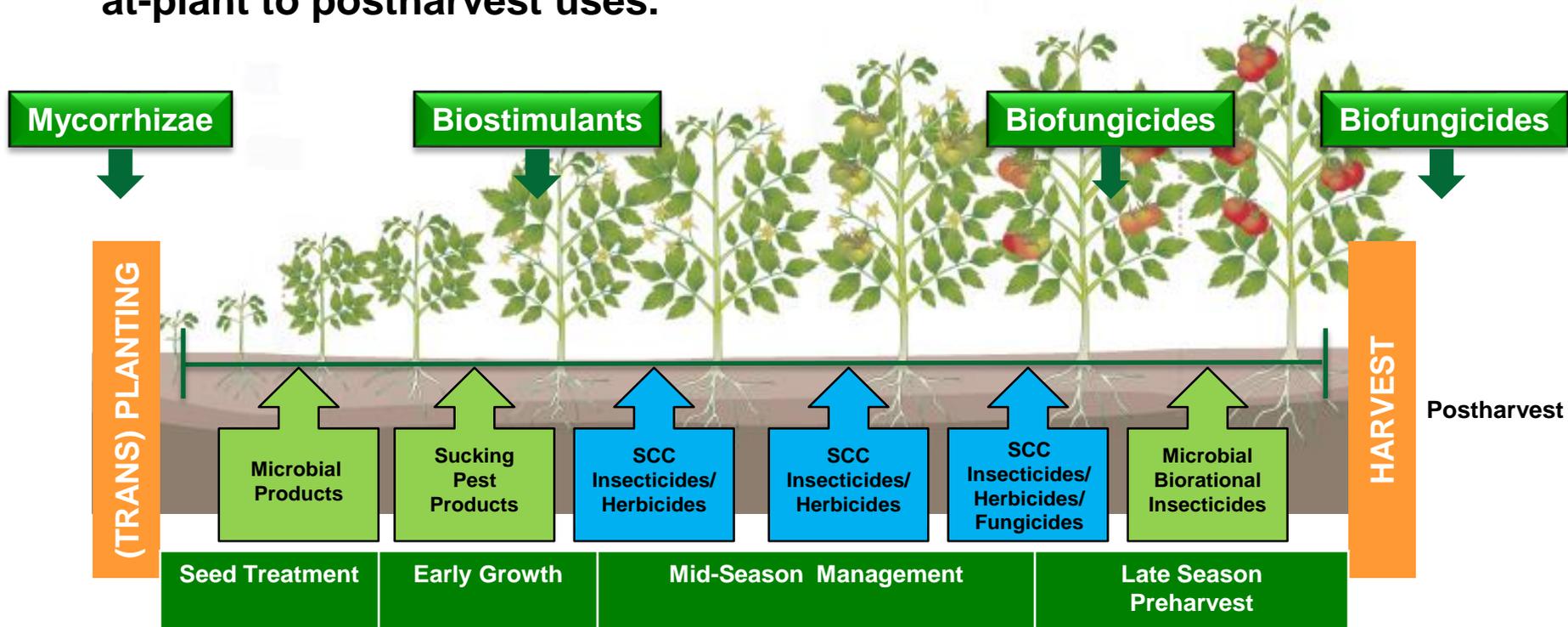
CHANGING MARKETPLACE

- Sumitomo Chemical was the First Mover with regard to development of a combined conventional + biorational product portfolio when it acquired VBC in 2000
- Since that time, Pace International, MGK, and Mycorrhizal Applications have been added to the SCC group of companies





Our growth strategy is based on commercializing complementary products/technologies to current VBC/Sumitomo product line from at-plant to postharvest uses.



<< DEVELOP COMPLIMENTARY POSITIONING TO SCC GROUP PRODUCTS >>





KEY DRIVERS IN SUPPORT OF THE GROWTH OF THE BUSINESS IN A CHANGING MARKET

- **Invest in our Strengths**
 - Spending industry leading percentage of Net Sales on R&D
 - Strengthening global foot print
 - Hire and Maintain an effective motivated Organization
- **Distribution Strategy**
 - Form Strategic Alliances with distribution partners who share vision
- **Development**
 - Develop new markets with innovative applications and bring biorationals to segments which did not use biorationals
- **Manufacturing Strategy**
 - Maintaining BEST in industry quality, competitive cost position through fully resourced and utilized facilities, run at the industry leading safety standards
- **Strategic Business Development**
 - Pace: for postharvest platform
 - MA: Soil platform
 - Actively looking for other complimentary technologies and businesses



USING SCIENCE TO BRING SOLUTIONS TO OUR CUSTOMERS

THE **BI** **WIN** PLATFORM

targeted application





**THANK YOU FOR YOUR
ATTENTION**