



Rationale: A small regulatory and strategy consultant



Global biopesticide
market

Increased over

200%

2000-2012



BIOPESTICIDES



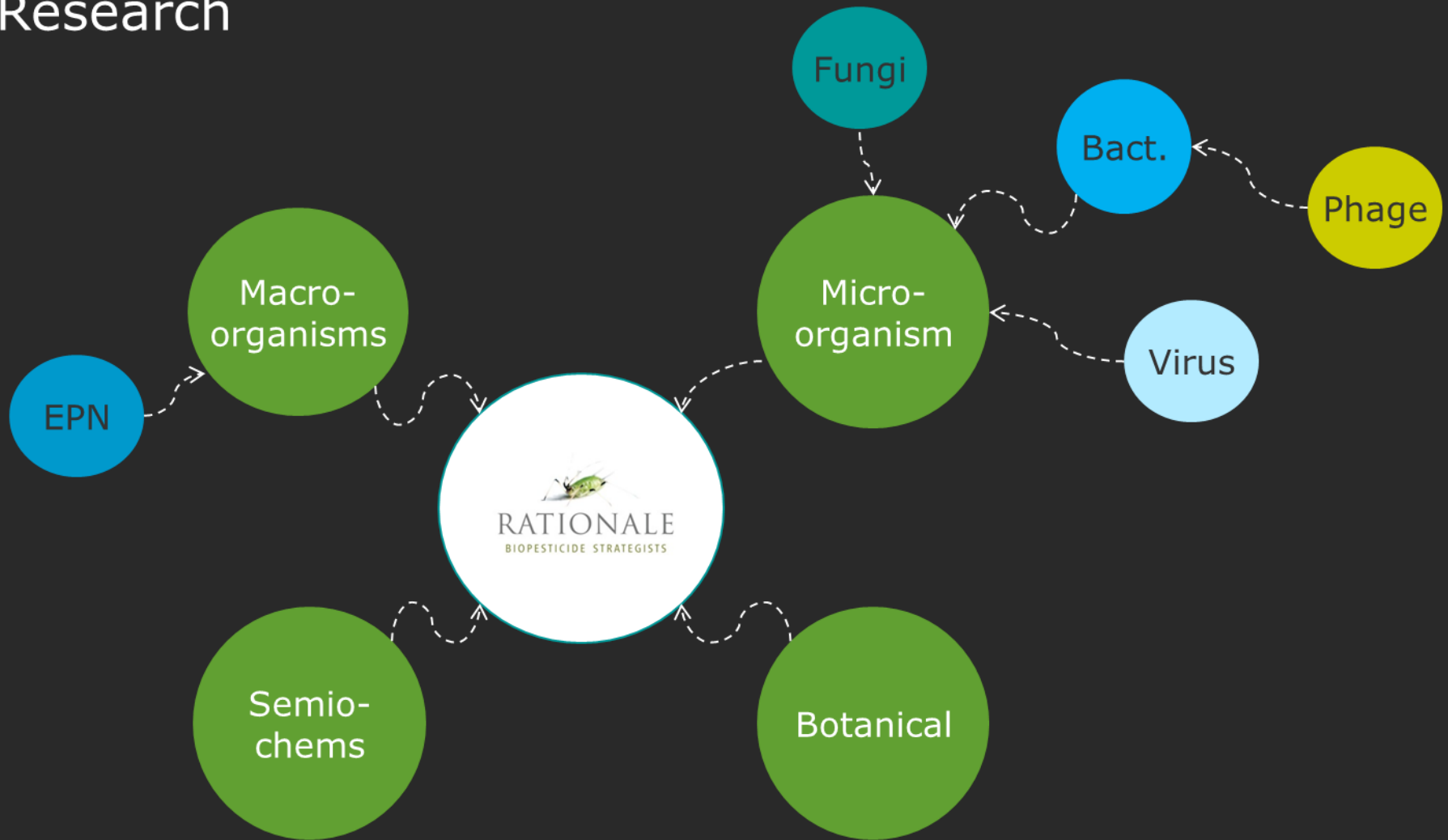
EU biopesticide
actives
> trebled
to 120
2000-2015

BIOPESTICIDES



Evolution

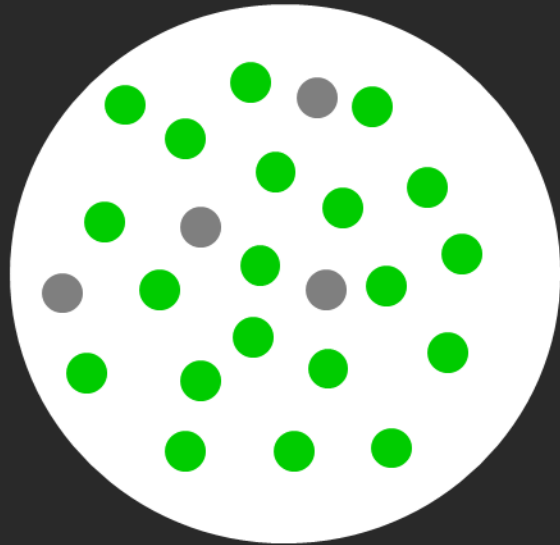
Research



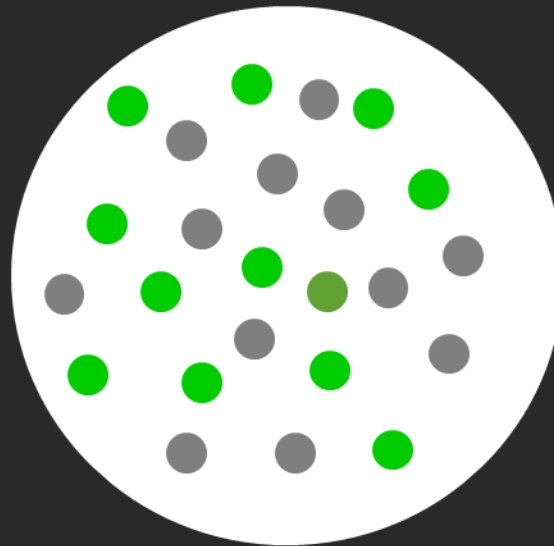
Very knowledge intensive

Biopesticide industry

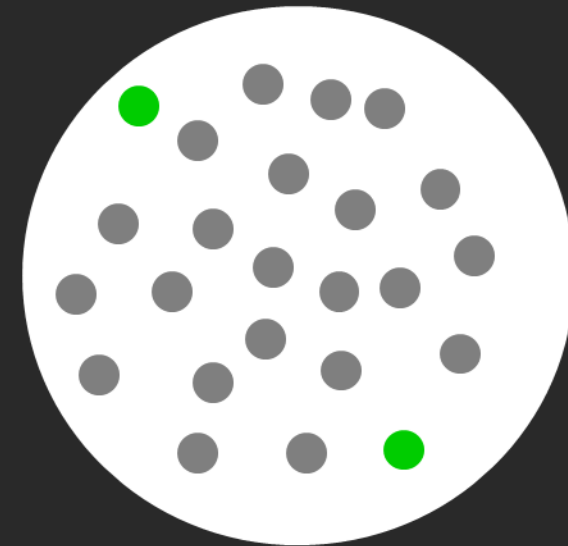
Start-up



SME



Multi-national



Very knowledge intensive

Consequences?

Know-how



Diluted

Systems



Standardise

Variability



Quality ?

Reductionist principles

Holistic principles

Systems biology

Complex



Era of **biology**
of IPM

BIOPESTICIDES



Recipe for success?

Employ systems biologists

Embrace variability

Good technology transfer

Maintain innovation

Directed by technology

Reflections

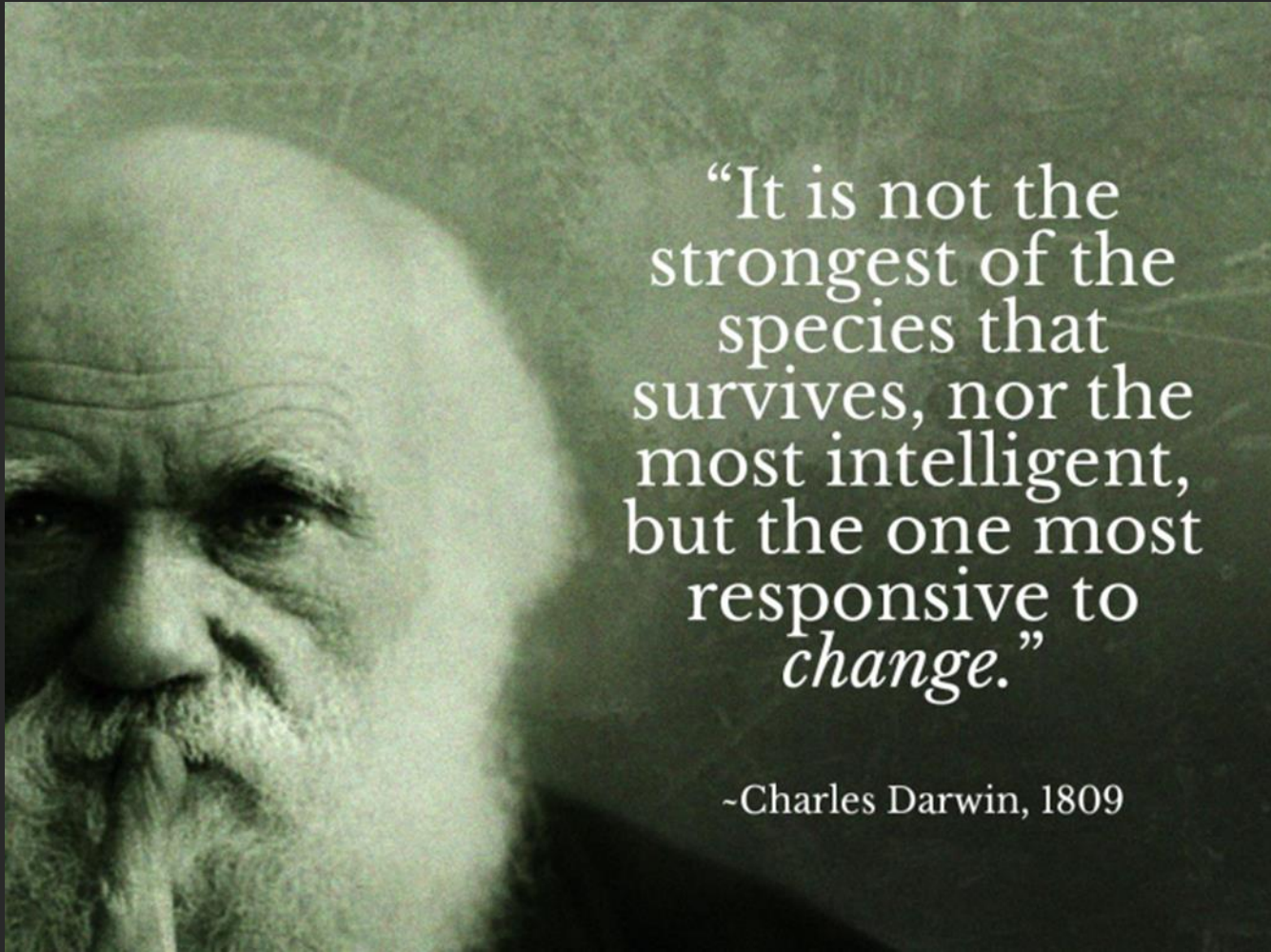
Research investment

Innovation

Harmonised regulation

Global grower demand

Better advocacy



“It is not the strongest of the species that survives, nor the most intelligent, but the one most responsive to *change.*”

-Charles Darwin, 1809

Thank you for your attention



RATIONALE
BIOPESTICIDE STRATEGISTS

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