Bringing plant potential to life

syngenta

Growing a career in agricultural science

Dr Niall Thomson

Syngenta Ltd

Jeallot's Hill International Research Centre, UK

Outline

Helping small and large farms meet the challenges of global food security

Our ambition

is to bring greater **food security** in an environmentally **sustainable** way to an increasingly populous world by creating a **worldwide** step-change in farm **productivity**

8M
large-scale farms
>100 Ha

450M
smallholder farms
~2.0 Ha

Our Contribution:
With passionate people and a comprehensive capability

World-class
science

Global
reach and
experience

Ambitious
objectives

Our Contribution:
With passionate people and a comprehensive capability

$1.4 billion
R&D investment in 2015 and
more than 5,000
R&D staff

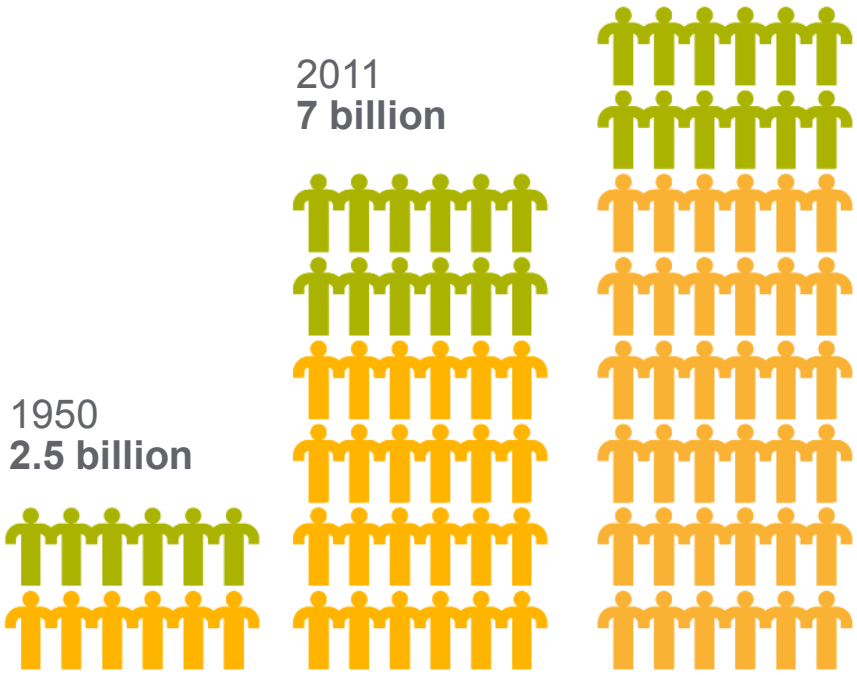
Over
28,000
employees
in some 90
countries

$13.4bn
sales in 2015

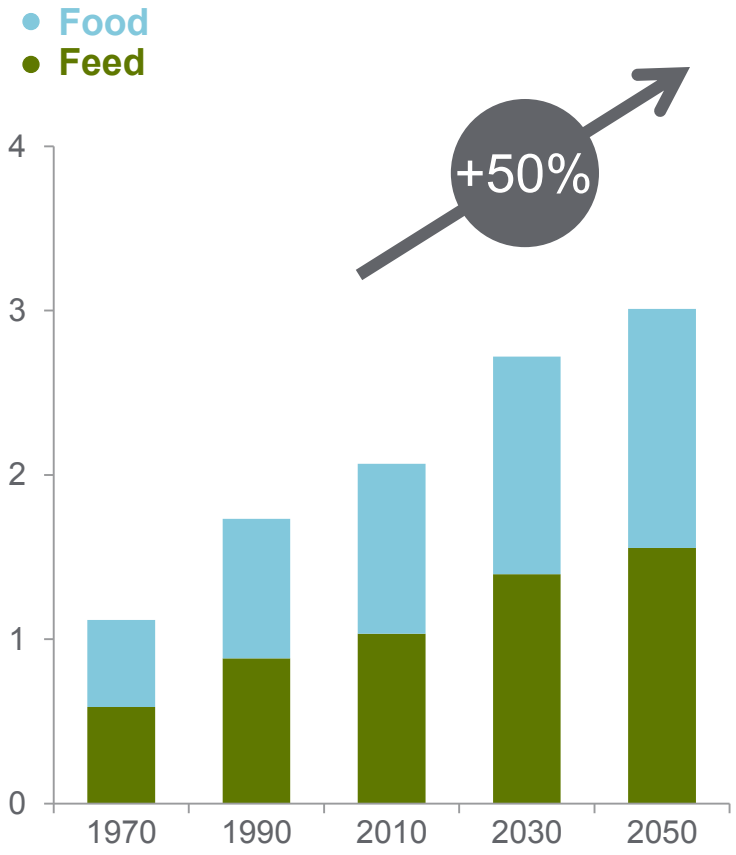
Demand for food is driven by population growth and rising calorie consumption

World population
> 80% of growth
in emerging markets

Developed
Emerging



World demand for grains*
bn tonnes



Source: FAO, Syngenta analysis

* Cereals, rice and corn

Environmental stresses are increasing

World stress map
Climate change is already reducing water and arable land

Agriculture uses 70% of the world's fresh water withdrawals

requiring better use of existing farmland

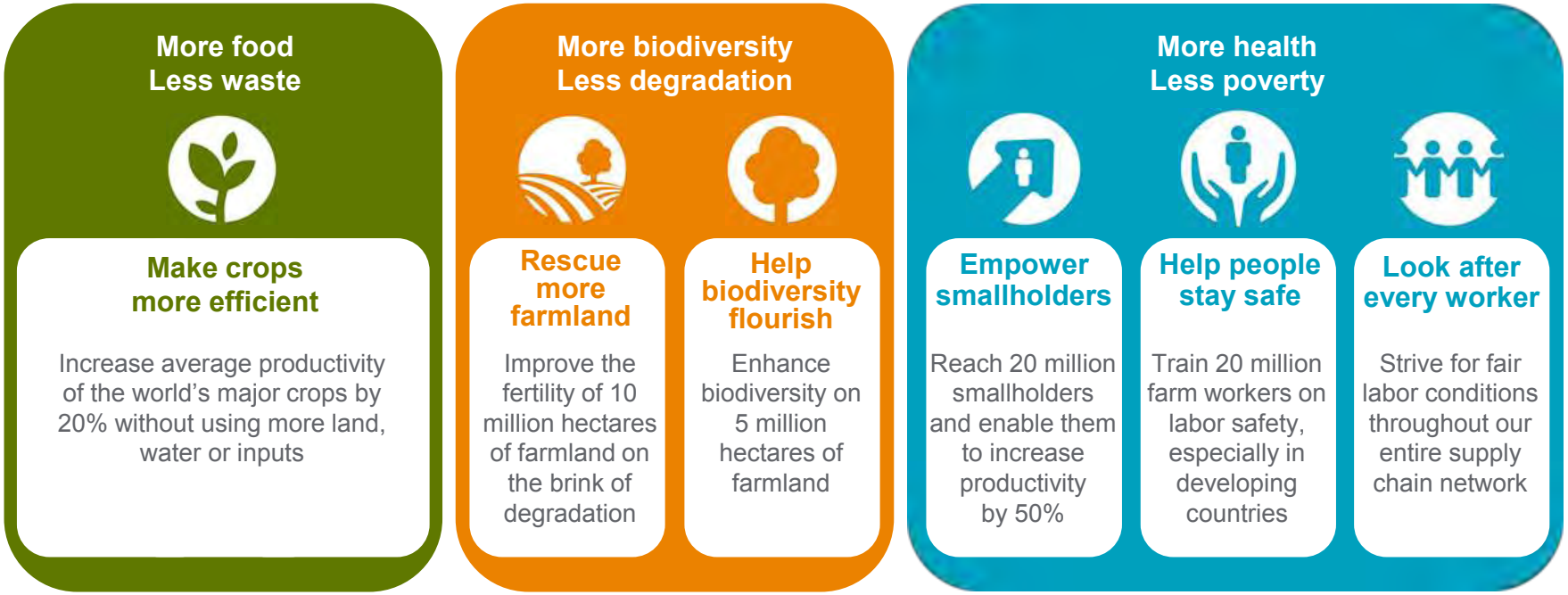
Source: UNEP, Cline, Syngenta

Syngenta offers tailored agronomic solutions

The grower's world is increasingly complex

The Good Growth Plan

We've made six commitments to help grow more food using fewer resources, while protecting nature, and at the same time helping people in rural communities live better lives



One planet. Six commitments.

Where do I fit…

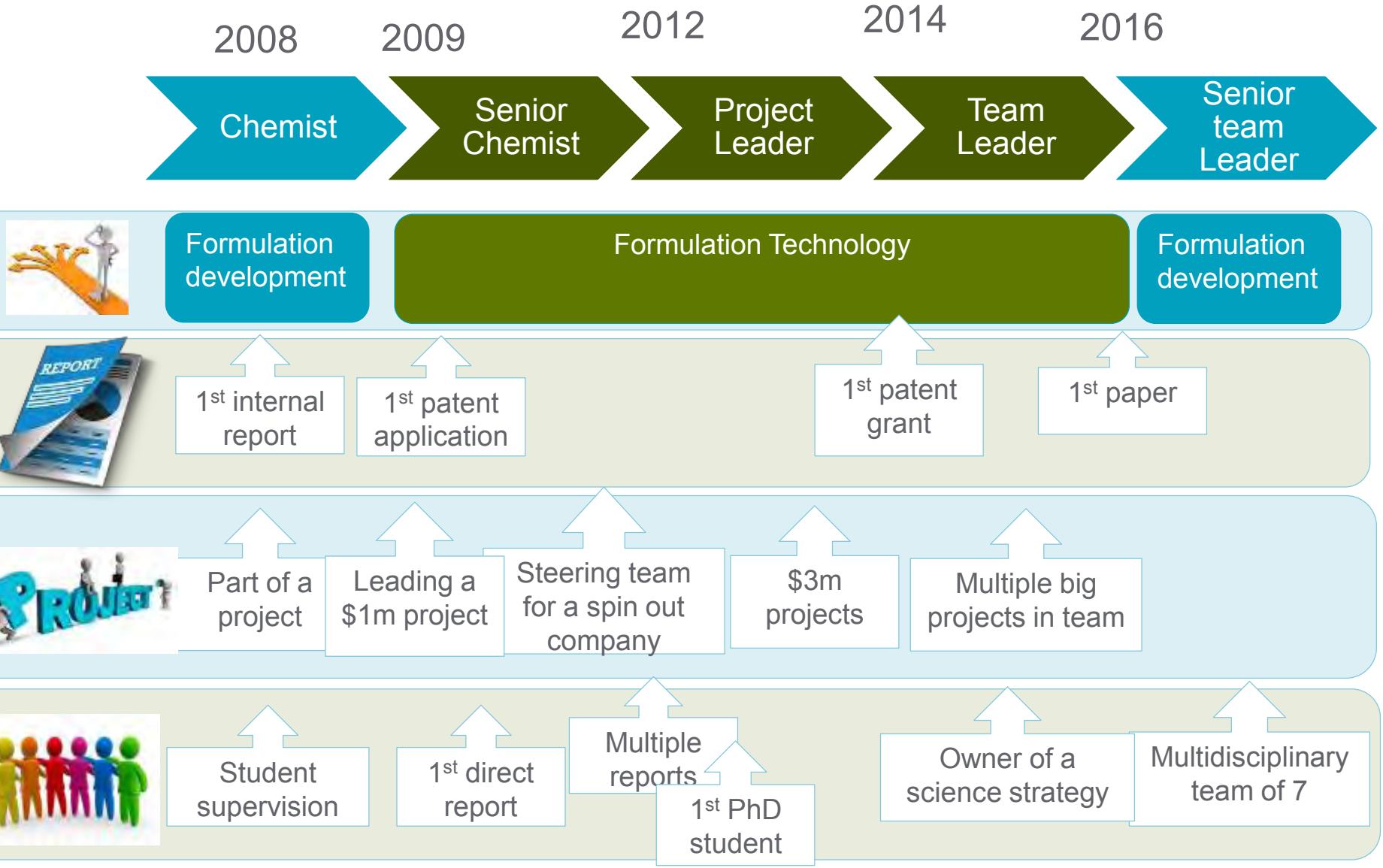
Chemical Physics Msci Glasgow University

University of British Columbia exchange programme

Materials Science PhD Imperial College London

Syngenta's
Largest
Research centre
Employs over **700**
R&D staff

My Career



Crop Protection formulations are:

Are ‘vehicles’ to safely deliver an active ingredient (to control a disease, pest or weed) to a crop/target in an **efficient, effective and convenient way**

Active Ingredients

Anti-settling

Biocide

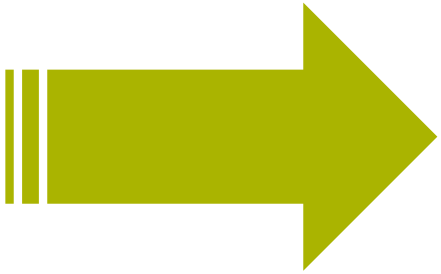
Anti-freeze

Solvent or Water

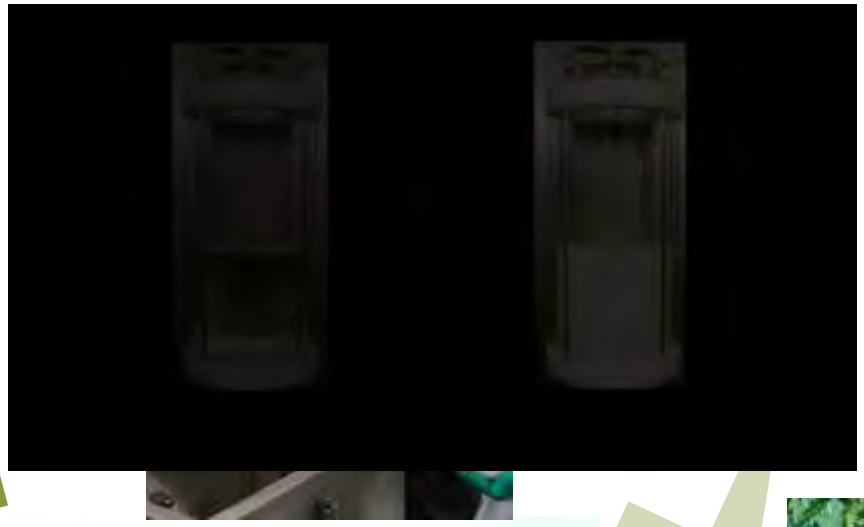
Surfactant

Anti-foam

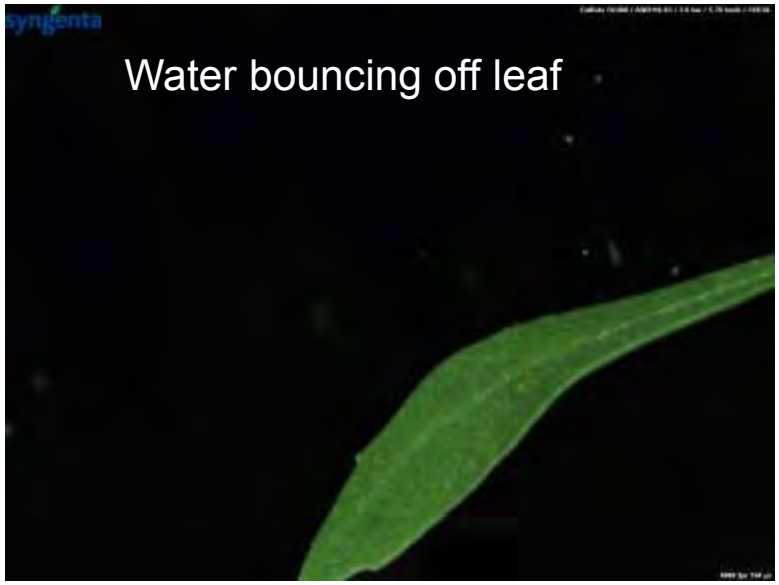
Adjuvants

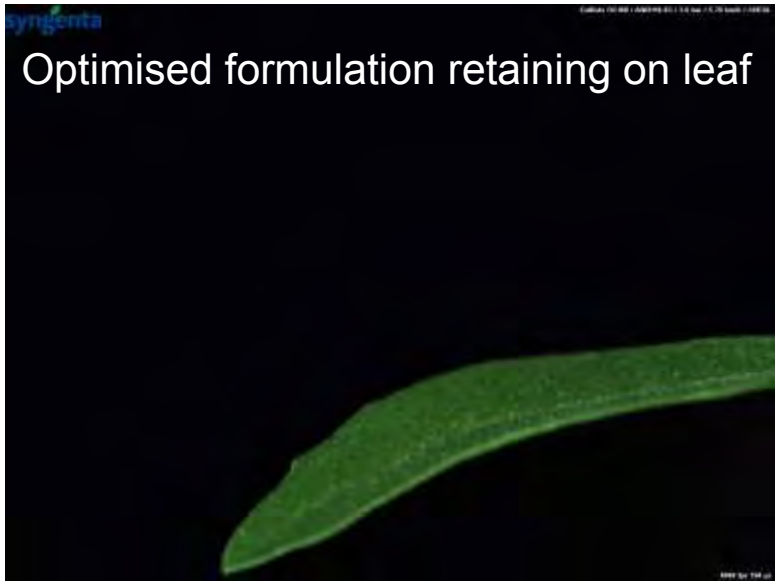


Why do we have to formulate?



SOLATENOL™: Application and droplet behaviour





ELATUS™ The future of soybean rust control

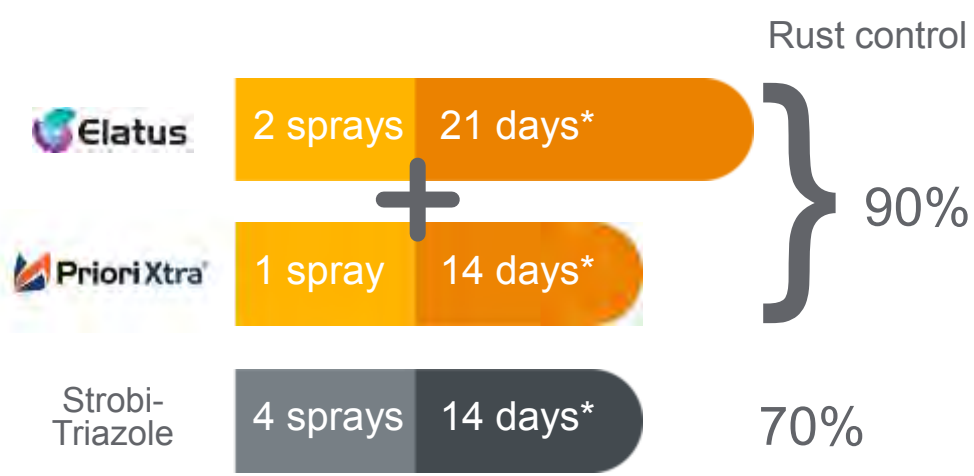
Elatus

A step change technology based on new SDHI chemistry

Treated

Untreated

Since 2000 rust has caused over **$20bn** of losses

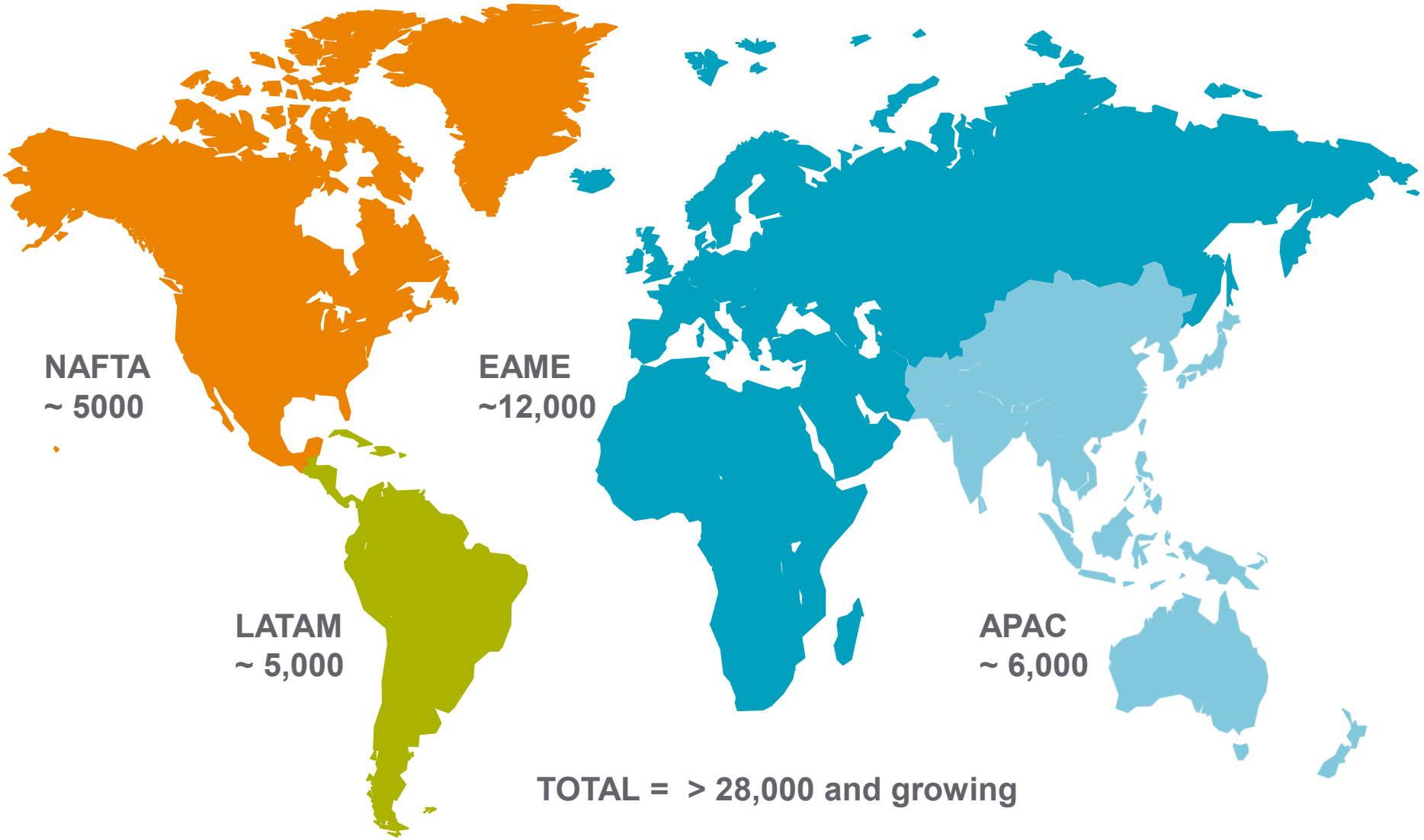


- Outstanding performance compared to current standards
- Providing longer spray intervals
- Securing higher yields

*Interval between applications

syngenta

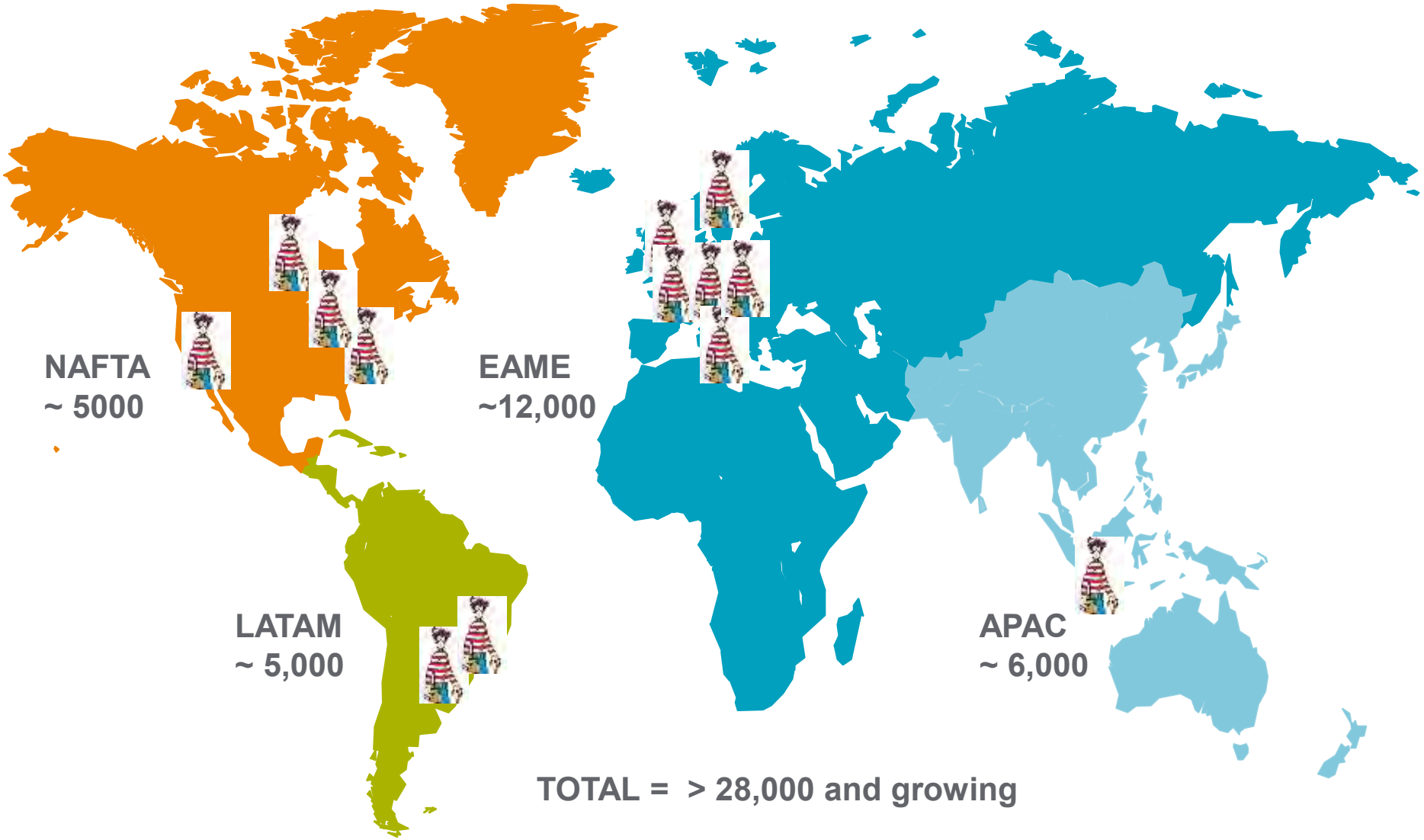
Where our people are located



TOTAL = > 28,000 and growing

syngenta

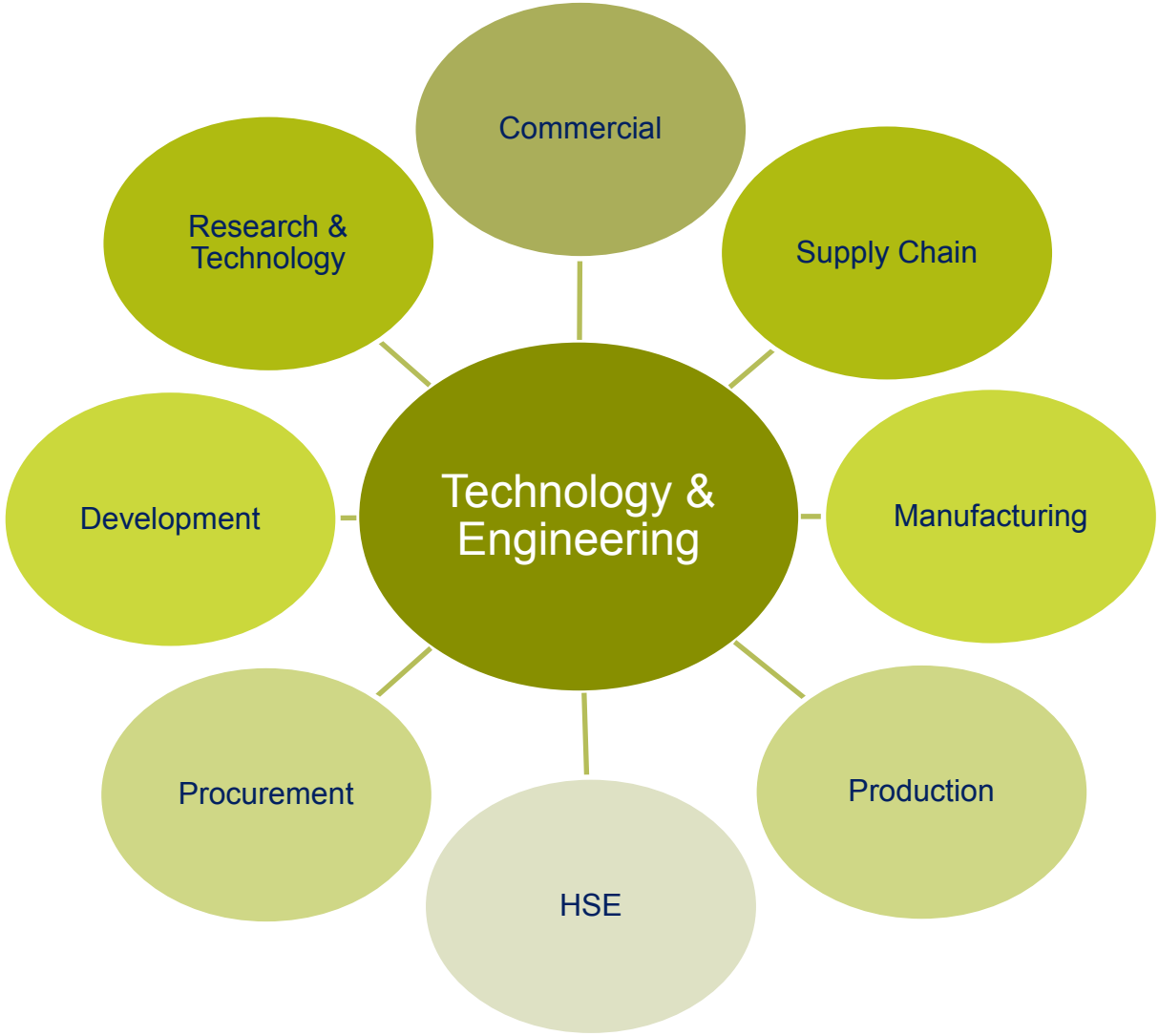
Where our people are located



TOTAL = > 28,000 and growing

syngenta

Technology & Engineering - Global Function with Strong Interfaces



Areas of work in Syngenta

- Chemistry – research, process, manufacturing, analytical, formulation.
- Biology – plant science, GM, seeds, entomology. Product biology
- Agronomy
- Engineering – production, seeds processing, pilot plant, development, project management.
- Regulatory – human, environmental, animal safety, toxicology, product registrations.
- HSE – environmental, occupational, information.
- IP
- Legal
- Business and marketing – includes supply chain, procurement, sourcing, asset planning etc.

www.syngentajobs.com

One Planet. Six Commitments.
www.goodgrowthplan.com

syngenta