



Syngenta Vector Control

INNOVATION & NEW PRODUCT DEVELOPMENT

Mark Birchmore
Global Brand Manager

Syngenta is a world leading agribusiness

We employ over 21,000 people

We have over 200 sites in more than 90 countries

We sell our products in over 120 countries, touching almost 95% of the world's population

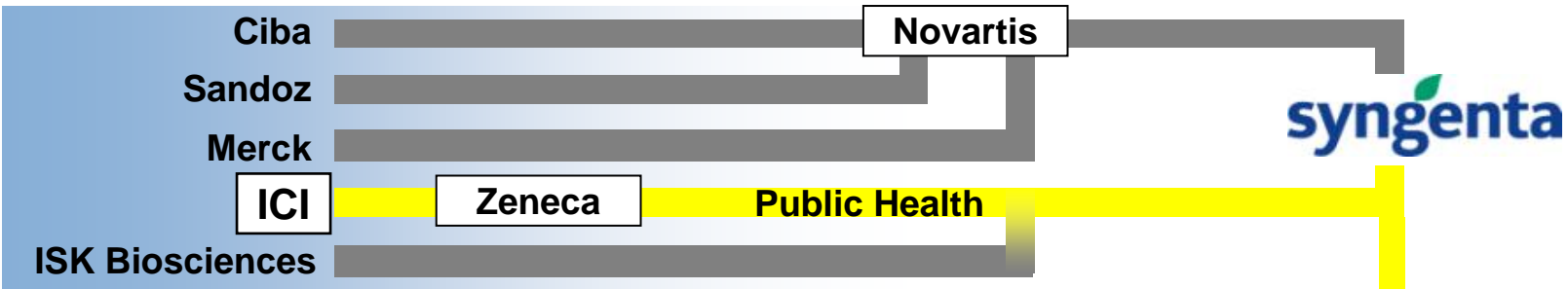
We invest \$2m per day on research and development



Our heritage in public health and malaria vector control



1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002



4 divisions

Crop Protection



Professional Products

Seeds

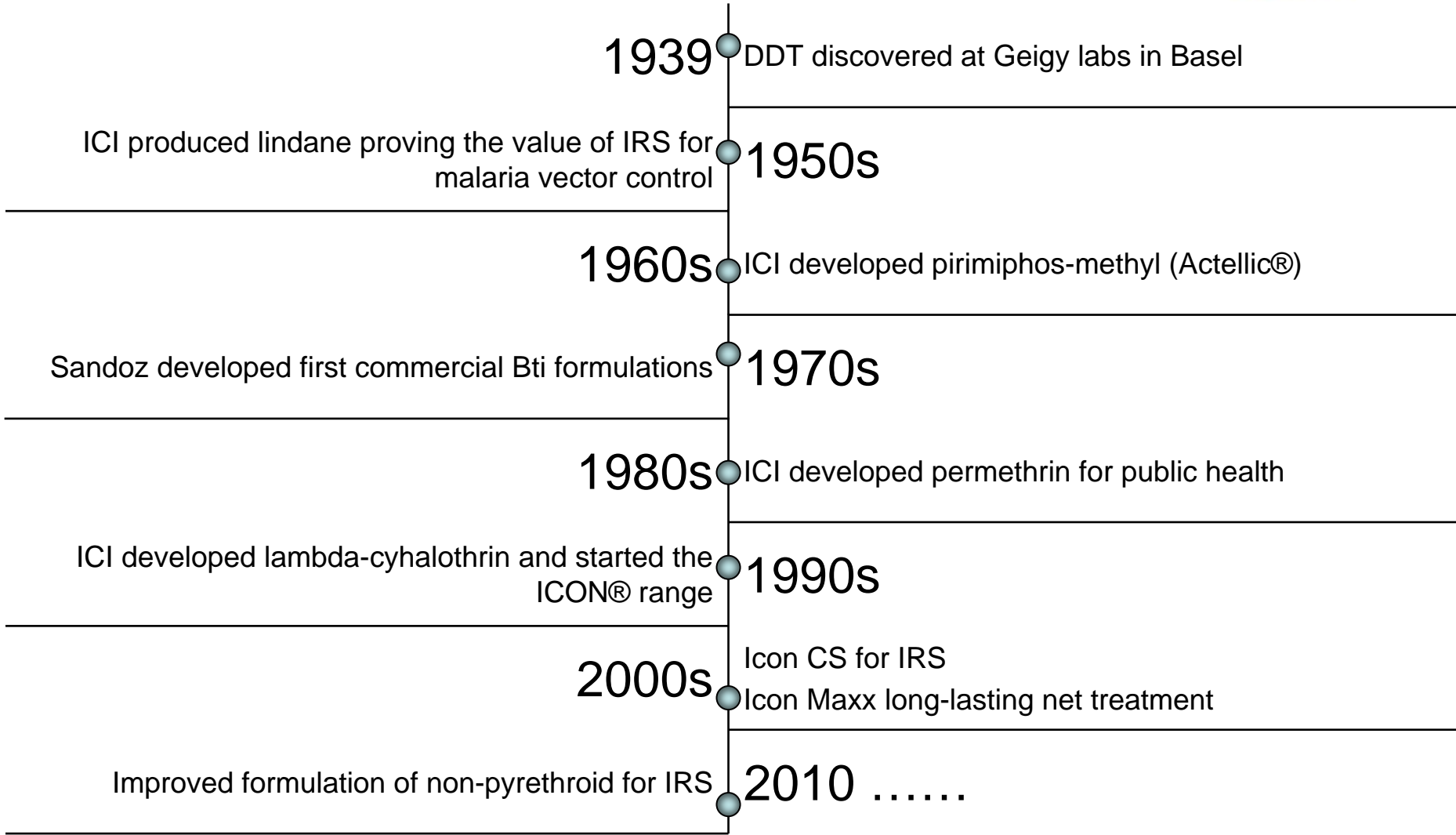


Business Development



A WORLDWIDE LEADER IN PROFESSIONAL PEST MANAGEMENT

Syngenta's product development legacy in vector control



Syngenta today: Exploiting our strengths

Leveraging Crop Protection R&D



Innovation

- Modern portfolio
- Dynamic pipeline

Breadth

- Technology, products, markets
- Integrated offers

Reach

- Territories
- Customers, consumers



Syngenta's core insecticide portfolio

| Chemical class | Active ingredient |
|-----------------|--|
| Neonicotinoid | Thiamethoxam |
| Pyrethroid | Lambda-cyhalothrin Tefluthrin Cypermethrin |
| Natural | Abamectin Emamectin benzoate |
| IGR | Lufenuron Cyromazine Buprofezin |
| Organophosphate | Pirimiphos-methyl Profenofos Methidathion |
| Carbamate | Pirimicarb Fenoxycarb |
| Others | Pymetrozine Bromopropylate Beneficial insects Diafenthiuron Third party products |



**Only
exploiting 2
ais in VC
today**

Primary malaria vector control portfolio: Integrated approach



1 Insecticide Treated Nets



2 Indoor Residual Spraying



3 Education and Training



1 Insecticide Treated Nets



Ready-to-use long-lasting insecticide-treated net
>20 washes



DIY Long-lasting insecticide net treatment
>20 washes

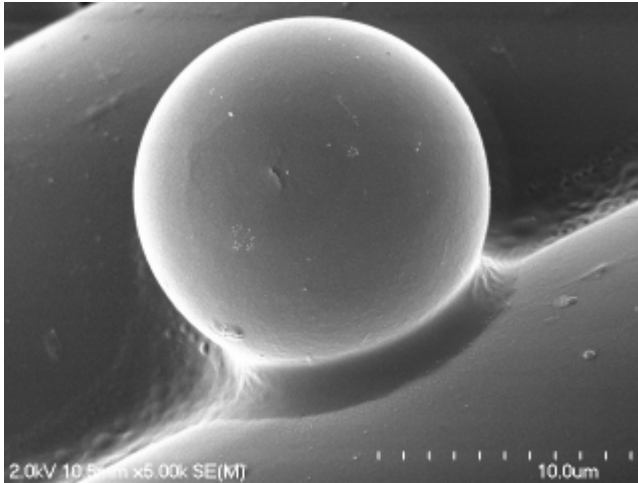


Conventional DIY insecticide net treatments



3-5 washes

What is Icon Maxx?



- A long lasting treatment for mosquito nets
- Based on Icon 10CS + polymer binding agent
- WHOPEs interim approval
- Convert existing or new untreated mosquito nets into long lasting insecticide treated nets
- Part of Integrated solution for keep up programs

2 Indoor Residual Spraying



icon 10CS
ADVANCED
RESIDUAL TREATMENT

Potential for more than 6 months control

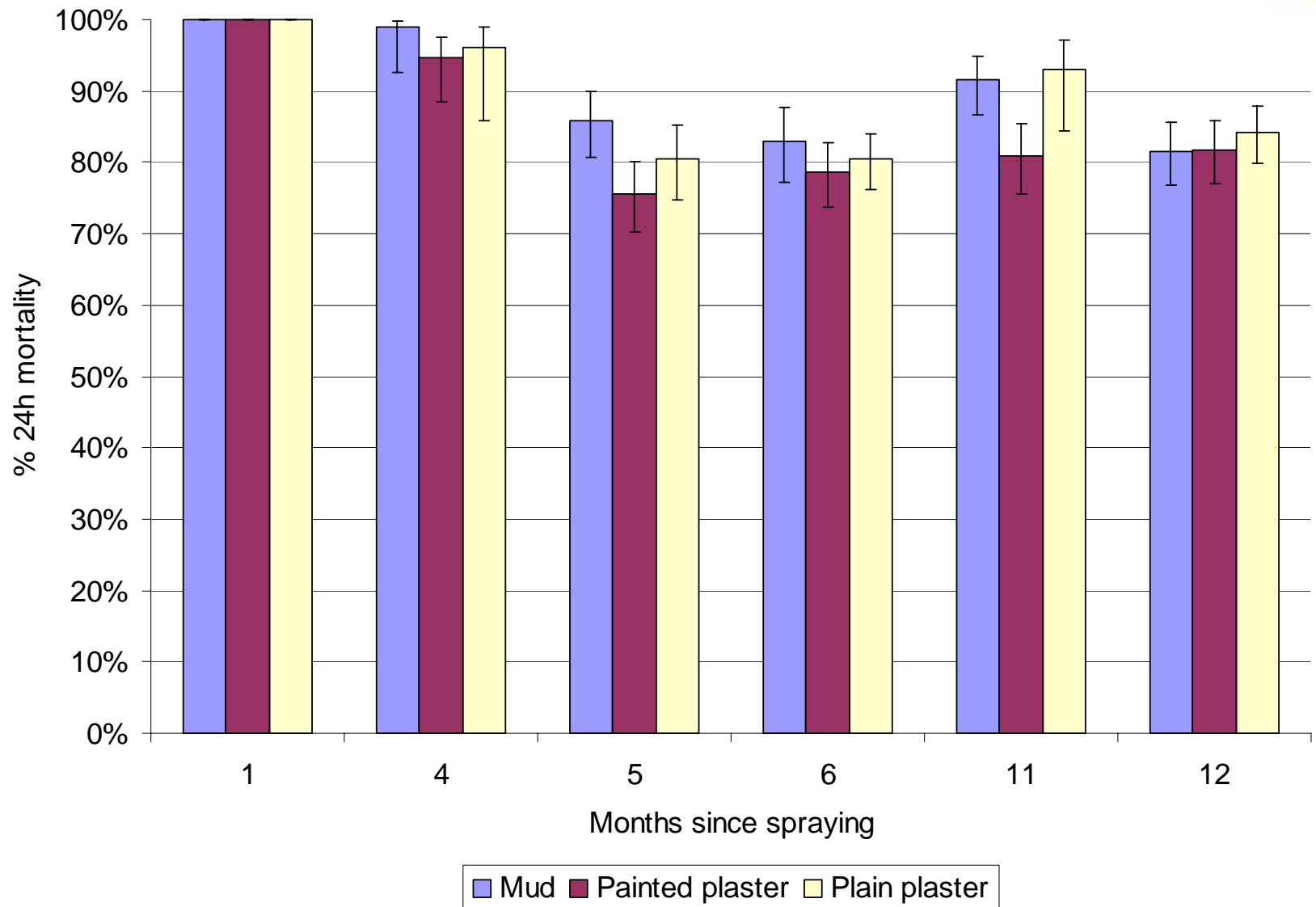
icon 10WP
RESIDUAL TREATMENT

3-6 months control

icon ACTELLIC[®]

Non-pyrethroid for resistance management

Icon 10CS (25mg ai/m²): Mortality of *Anopheles gambiae* on various surfaces



Packaging innovation: ICON 10CS Unit dose



Shake sachet and tear open



Pour in to tank and rinse sachet inside with water

Close and agitate sprayer as usual



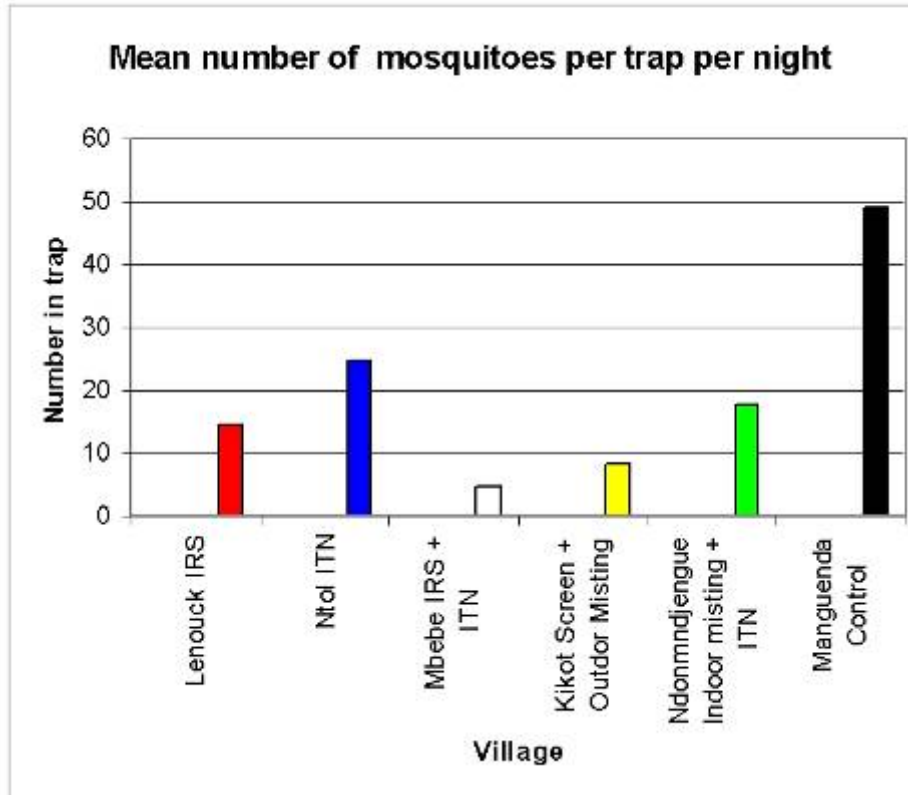


- **Central program / stakeholder awareness**
 - Pre-implementation logistics advice & spray regime planning
- **Training the trainer: teaching resources – full and ‘refresher’ course**
 - Stewardship
 - Safe use of pesticides
 - Vector control application
 - Indoor Residual Spraying
 - Net treatment
 - Space Spraying
 - Larviciding
- **In-field training & support**
 - application training - sprayer operation & calibration
 - disposal & hygiene
- **Monitoring & evaluation**
 - Entomology – identification,
 - Bioassays
 - Resistance monitoring

Syngenta



Village pilot trial for combination interventions



- Village scale IVM pilot trial in Sanaga Valley, Cameroon in partnership with the Yaoundé Initiative Foundation
 - Mosquito and blackfly control
 - One village per treatment arm
 - Applications made by local **‘Village Intervention Teams’** trained using via Icon Academy
 - IRS + ITN both using ICON® CS – pyrethroid
- All interventions impacting mosquitoes – combinations encouraging especially IRS+ITN with Icon CS

- What can we do today?
 - Dedicated unit for Vector Control
 - Focused attention and innovation
 - Leveraging our broad reach in Africa
 - Providing a broader malaria prevention portfolio
 - IRS and LLINs
 - Education and training / stewardship
- Broader potential within the pipeline
 - Re-tasked or new ais
 - New formulations / delivery systems
 - Operational field research
 - New methods of implementation
 - New partnerships to accelerate delivery alongside SUFI challenge