

## Syngenta Crop Protection Münchwilen AG Research Biology Center at Stein

Research Biology was set up in Stein two years before the 2000 merger to form Syngenta. It combined the infrastructure for fungicide and insecticide research with an extension to greenhouse capacity for herbicide research. This had been operating at the site for several decades.

Today, the Center comprises more than 50 laboratories, over 100 growth chambers and 9000 m<sup>2</sup> of greenhouse surface. 130 research biologists and technicians use them to identify and profile biologically active compounds. These are assessed for their potential in crop protection. Stein employees work closely with Discovery colleagues in the US and UK. They also provide global Development and Marketing with biological information, and analyze the phenotypes of agribusiness-relevant organisms.

Stein scientists focus on whole-organism-based testing. The Center's excellent screening and bio-logistics use state-of-the-art robotics and IT. Key screening objectives are to define spectrum of action, tolerance, systemicity, application parameters, activity level and special effects. This is done using only minute amounts of chemical. Project teams link chemistry to the field by interpreting the agronomic relevance of their findings.

In addition, newly established facilities at the Center carry out GLP lysimeter and pond studies for worldwide registration of crop protection products. Staff accompany these with metabolism studies in field and greenhouse, plus kinetic studies on active ingredients' fate in plant and soil. "Semi-field" greenhouse investigations of potential unwanted side effects on beneficial insects also run at the site.