

Using research and development to improve agricultural productivity

New product development

Finding a new compound and bringing it to market is a long process.

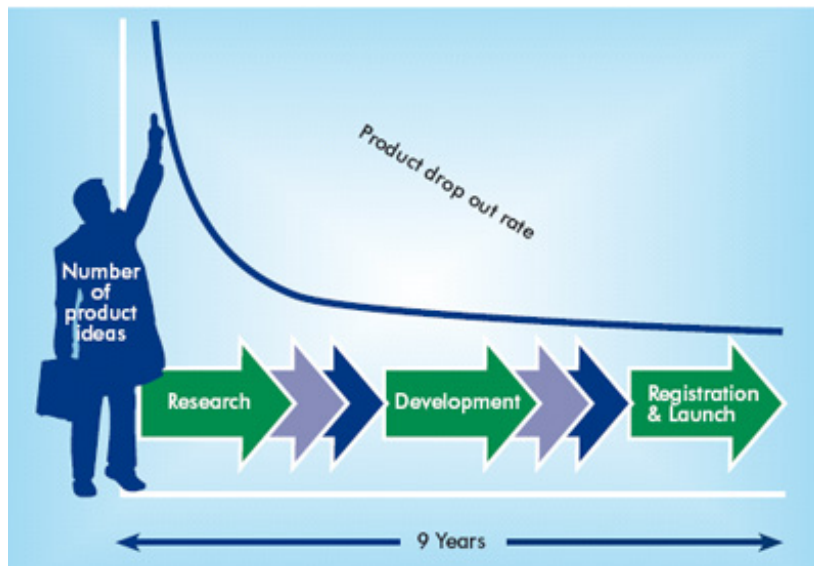
Here are the main stages of the R&D process:

1. Identify new areas

The research needs to identify areas of opportunity. In crop protection this often starts with chemistry. Chemists look for new compounds which will overcome existing problems or where resistance to existing products has developed in pests or diseases.

2. Test the new ideas

Biologists then test the compounds to see if they have the active potential to become products whilst ensuring environmental safety.

**3. Trial in specific conditions**

Researchers and developers test whether the compounds would work in various conditions, for example, in open fields. By a process called formulation development the active ingredients become a product that farmers can use.

4. Product safety

Environmental scientists ensure that products are safe to use. This is an assessment which goes on throughout the above process.

5. Support users

When the products are launched, Syngenta provides support for farmers. This helps them use the products in the most effective way.

During the phases of research and development, a large number of compounds and plant varieties will be dropped because they do not meet the high standards required by the company and the Government regulators.