

BASF TV Service for television and online journalists at tvservice.basf.com

### **Quarterly Statement 3rd Quarter 2017**

Ludwigshafen, Oct 2, 2017

#### **Footage material**

As the world's leading chemical company, we believe strongly in the emotional appeal of film as a way of making innovations and solutions come alive before the viewer's eyes. Of course, as a journalist you can't be everywhere, but we can help bring you a little closer to our world.

- **01 Plant Health Plant Health Research** (LINK to the BASF TV-Service)
- **02** BASF Plant Science Protein Analytics Lab (LINK to the BASF TV-Service)
- **O3** BASF Plant Science Laboratory buildings and Greenhouses (LINK to the BASF TV-Service)
- **04 Plant Health Herbicide Lab** (LINK to the BASF TV-Service)
- **O5** The Future of Crop Protection Active ingredient test (LINK to the BASF TV-Service)
- **106** The Future of Crop Protection Measurement of chlorophyll content (LINK to the BASF TV-Service)



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# **00'06** (01) Plant Health

Plant Health Research



One challenge for sustainable development is ensuring enough food for a growing world population. Since arable farmland is limited, innovations are essential here. Our research and development activities focus on solutions ranging from soil to seeds and crops.

The Research Triangle Park (RTP), North Carolina, is one of BASF's six major hubs for research and development in North America. This research site is at the vanguard of global plant health research for BASF.

The technical competencies include agricultural products research and development, insecticide, fungicide and herbicide research, formulation research and scale-up and analytical support for R&D.

In addition to products for seed enhancement and innovations for better soil management, BASF will also provide technologies that make plants more resistant to stress factors such as heat, cold and nutrient deficiency. These solutions strengthen the health of crops, thus going beyond conventional crop protection.



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# 02'18(02) BASF Plant Science Protein Analytics Lab



BASF Plant Science is one of the world's leading companies in plant biotechnology for agriculture. Our headquarters at the Research Triangle Park site near Raleigh, North Carolina, ensure our proximity to our main markets in North and South America.

Experiments in the protein analytics lab support the development and characterization of traits. BASF Plant Science develops traits that make plants more resistant to fungal pathogens, tolerant to herbicides or produce higher yields.

Senior Scientist Helen Mu and Assistant Scientist Wasima Wahid examine a protein assay, which is done to quantify proteins in plant extracts.

With our global network of research sites in the United States, Canada, Belgium and Germany, we help farmers meet the growing demand for increased agricultural productivity as well as better nutrition. BASF invests more than €150 million per year to accomplish these goals.



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#### 04'22

#### (03) BASF Plant Science

Laboratory buildings and Greenhouses



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In RTP, BASF manages a total of 480,000 sq. ft. and employs approximately 950 people. RTP serves as headquarters for the North American activities of BASF's Crop Protection division as well as global headquarters for the Plant Science division. BASF has been a pillar of the North Carolina agricultural industry for the past decades, following the 1986 groundbreaking of the site.

BASF Plant Science is one of the world's leading companies providing innovative plant biotechnology solutions for agriculture. Today, about 950 employees are helping farmers meet the growing demand for improved agricultural productivity and healthier nutrition.

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### 06'24 (04) Plant Health Herbicide Lab



One challenge for sustainable development is ensuring enough food for a growing world population. Since arable farmland is limited, innovations are essential here. Our research and development activities focus on solutions ranging from soil to seeds and crops.

Weeds can acquire resistance to herbicides as a result of natural mutations. This property of plants is used by BASF researchers. Scientists trigger gene mutations in cultivated plants and cross these plants with one another several times. By using these traditional breeding methods, researchers obtain daughter generations with a variety of characteristics.

Agricultural Biologist Sarah Meadows and Biologist Chad Brommer test herbicide chemistry. New active ingredient candidates and advanced formulations from herbicide research have a strong commercial potential.

In addition to products for seed enhancement and innovations for better soil management, BASF will also provide technologies that make plants more resistant to stress factors such as heat, cold and nutrient deficiency. These solutions strengthen the health of crops, thus going beyond conventional crop protection.



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#### 08'28

#### (05) The Future of Crop Protection - Active ingredient test

Research for greater efficiency in agriculture



By 2050, demand for food, feed and fuel will have increased by 70 percent. Thanks to technology and innovation, farmers can now use natural resources more efficiently. Sustainable land use and management enable both high yields and biodiversity.

The plants are transported on rotating plates through a spray booth where they are sprayed with active ingredients. Lab employees inspect whether the active ingredient has been evenly applied to the plant. BASF's goal is to develop innovative crop protection products from active ingredients using an automated process.

BASF's crop protection products undergo many years of extensive risk assessment to ensure that there are no unacceptable effects on plants and animals. Regulatory authorities carefully evaluate these studies and risk assessments before they allow a product to be marketed. BASF is constantly focused on developing innovative products, concepts and partnerships to improve biodiversity, resource efficiency, and the sustainability of farming.

BASF adheres to the responsible and ethical management of all its crop protection products throughout the entire life cycle, from discovery, through use, recycling and disposal. BASF works to reduce emissions into the environment during the production process and to optimize water protection concepts at its manufacturing sites.



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#### 10'32

# (06) The Future of Crop Protection - Measurement of chlorophyll content Monitoring the nutrient content and quality



By 2050, demand for food, feed and fuel will have increased by 70 percent. Thanks to technology and innovation, farmers can now use natural resources more efficiently. Sustainable land use and management enable both high yields and biodiversity.

BASF conducts research on new active ingredient compounds in order to produce innovative crop protection products for the future. In the greenhouse, lab employees evaluate the results of their testing. At regular intervals, they measure the plants' chlorophyll content and record the changes.

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