

Using Visitors' Programmes to Educate and Raise Awareness about Biotechnology

SUMMARY: Many biotechnology companies host visitors' programmes that help to educate those in their communities and beyond. These programmes offer opportunities for the public to visit facilities where research on agricultural biotechnology is being done, see the technology first-hand and meet the people who are developing it.

The companies that develop agricultural biotechnology products globally have facilities around the world. In many places, the public is invited to visit corporate research laboratories, greenhouses and field trials and learn more about the safety and benefits of the technology from the people who are creating it.

Hand's on in the lab

The Bayer Student Laboratory programme, or "Baylab" for short, gives primary and secondary school students the chance to become researchers for a day at several of the company's labs and innovation centers. The Baylab plants center at Bayer CropScience's headquarters in Monheim, Germany focuses on plant science in a practical way that is meant to complement the curriculum of the schools.

Programmes vary according to the students' ages and interests but topics may include plant biotechnology, traditional breeding, molecular marker- and RNAi-technology, saturated and unsaturated fatty acids, and esterification, as well as policy issues such as agriculture and world population. Students can participate in three different hands-on experiments with canola, extracting oil from seeds, converting it into biofuel and analysing genes.

The goal is for young people to have a better awareness of plant science as well as the challenges facing agriculture in the future. With around 2,000 guests visiting the BayLab in Monheim since its inauguration in November 2008, perhaps a few promising research careers have begun



as well. Cooperation with other labs from public institutions is under consideration to broaden the scope and global view.

Out in the field

Monsanto Company offers two tours of research facilities at its company headquarters in St. Louis, USA.

The Breeding & Agronomics Technology tour highlights the ways that tried and true plant breeding practices are combined with modern knowledge and skills to develop seeds, while the Biotechnology tour teaches visitors about biotechnology techniques and walks them through greenhouses and growth chambers.

Out in the field, there are different tours. Monsanto's Learning Centers were created primarily for the agriculture community, including farmers, dealers and agronomists. Each of the three centers in the United States offer access to research labs and classroom training, but the demonstration fields always draw the most attention. Farmers can compare products under development as they grow right next to more familiar and commercially-available products. They can look at the impacts of different cultivation practices being tested to get the maximum yield from biotechnology crops. Stewardship practices that allow biotech crops to be grown safely and sustainably are also demonstrated in the field.

The newest of these Centers is the Water Utilization Learning Center in Gothenburg, Nebraska. It's focussed on helping farmers use water in the most efficient way

possible while maintaining or increasing the productivity of their crops, which is important in both dryland and irrigated areas. The Gothenburg Learning Center demonstrates different tools that farmers can use for water management including irrigation strategies, new biotechnology crop varieties that are under development, and agronomic practices such as planting populations, row spacings and tillage systems. The facility can grow crops under different scenarios, using different combinations of these tools, right next to each other for easy comparison.

Something for everyone

Pioneer provides tours to visitors at several of its biotech facilities, but most popular by far is their headquarters in Johnston, Iowa, USA. Designed to provide a broad experience of agriculture and biotechnology to a wide range of stakeholders, the company has been hosting visitors for three decades and averages more than 5,000 guests per year.

Most visitors are farmers, although policy makers, regulators, academia, opinion leaders and students are frequently hosted as well. Most visits are the result of invitations that Pioneer extends to various stakeholder groups, but other members of the public can request a visit via the company's web site.

Pioneer has a Visitors' Services team that is dedicated to addressing the unique concerns and questions of each visitor. For example, visitors from a country where biotechnology crops are not grown will have different interests than farmers from a nearby state. So the team develops customised tours which include explanations of the science behind biotechnology, as well as visits to labs, greenhouses and demonstration fields.

Technology changes quickly, and ongoing education is critical for Pioneer's tour guides if they are to address the questions and concerns of visitors from such diverse backgrounds. The Visitors' Services team is in constant

contact with the company's research organisation in order to thoroughly understand new technologies and explain their benefits.

New frontiers

When Syngenta opened the doors to its first agricultural biotechnology research and technology center in China in early 2008, they began operations from leased space while constructing a permanent facility. Nevertheless, the company almost immediately began hosting visits from the public as part of its commitment to local and national stakeholders.

Many visitors to Syngenta Biotech China (SBC) come from within the community of the National Life Science Park where they are located, north of Beijing. The Science Park is home to dozens of domestic and foreign biotech firms and institutes.

Policy makers and local government officials are also frequent guests, as SBC is the first foreign-funded agricultural biotech research center in China. As a multi-national company operating in

China in this unique way, it's important to be open and transparent to these stakeholders.

The center also plays host to academics and scientists from research institutes around China and abroad. SBC has more than 20 collaboration programmes on-going or under discussion across the Asia-Pacific region, and uses visits to plan joint activities and exchange ideas and experiences among scientists.

Conclusion

Corporate visitors' programmes offer a range of educational activities and experiences to the public in their communities and beyond. But what they all have in common is that they offer opportunities for personal dialogue between stakeholders and company employees in person. Visitors learn about the company and its products while their hosts learn about the needs and challenges of their stakeholders – raising everyone's awareness about the future of agricultural biotechnology.

