GMO regulation around the world

Although some international agreements are in place, e.g. the Cartagena Protocol on Biosafety, it is important to realise that GMOs are governed based on national legislation. Every country or territory therefore has to right and ability to decide exactly how they would like to use and regulate GMOs. This has not only led to many differences in the technical legalities between various countries, but also resulted in differences in the general tone and scope of GMO legislation.

Canada, for example, regulates any organisms with “novel“ traits, even if those traits were not introduced using GE techniques (also referred to as a product-based regulatory system), whereas South Africa has a more process-based approach and regulates any organisms that gave been generated using GE techniques. This results in a situation where products that are regulated in Canada may not be regulated in South Africa and vice versa.

Another example of different approaches to GMO regulation is the way in which approval is granted. In South Africa a GMO approved for cultivation receives a conditional **“commercial release” permit**. Permit conditions may include, for example, risk management and/or reporting requirements. In the United States of America approved products are **“deregulated”**, which means they are deemed equivalent to the conventional counterpart and are no longer subjected to any regulation.

The “regulatory unit” (the entity that receives approval) of all regulatory systems around the world is the **“GM event”**- a genetically unique GM individual that is subsequently used in a breading program to propagate the GM trait in its progeny. This means every GM event must be approved by every national regulatory authority where it may be imported or cultivated. **Asynchronous approval** refers to the situation where one country has already approved a GM line for cultivation, but where the same has not yet been done by the countries to which they may want to export the product.