

Interview with Heike Mikschofsky

Dr Mikschofsky, what is the main focus of your research work?

I am researching how plants can be used as a production system for pharmaceutical products. For this we use genetically modified plants to see whether plant cells or whole plants are capable of producing such high-quality proteins.

What is the motivation behind your work? What do you find fascinating about it?

I have been interested in plants and plant cells since I was in years 7 and 8 at school, because plants come before everything as primary producers, and because their cell processes, i.e. photosynthesis, biomass production and oxygen generation, make them vital to human life. And I find it very exciting and fascinating to investigate this further from a scientific point of view, to analyse how plant cells function, how genes are related to the way they work – to find out more about it and to process this knowledge directly with students.

The public attitude to plant biotechnology has worsened over recent years. Another trial field was destroyed just last week. How does this affect your work and how do you feel about it personally?

Personally, I have to say that I have found the last three months very difficult. I am constantly questioning my work, my value that I am investing in this work, which I feel is not being appreciated at the moment – not by the field vandals or by the public. In other words, despondence and resignation are creeping into my private life as well. However, once you get through these low points, you see what is interesting about the work, that you really want to play a part in it – if, like me, you see a real value in these plants and want to take the work further. At the moment we are cutting ourselves off from potential applications at a very early stage of the research, which in my view is a case of supreme arrogance: Can we be so arrogant today as to say we don't need plant biotechnology?

How do you deal with all that?

For me, the only solution is through public discussion – getting out there as often as possible, making contact with critics, holding debates. Acceptance and respect are very important to me. I think that different opinions, alternative approaches, different ways of producing plants, of breeding plants, should be considered and made use of. And I see a very great need for knowledge transfer. What *is* biotechnology? What are the methods involved? And how do I, as a consumer, come into contact with biotechnology every day? This knowledge is currently not out there and if it was more widely perceived it would, in my view, radically change the image or the perception of plant biotechnology as well.