



Fungus misleads roots

Plant roots don't simply grow in random directions; they respond to stimuli in the soil. Kay Moisan recently received a PhD for her work on this.

To demonstrate this effect, Moisan designed a tube shaped like an upside-down Y where the plant has to choose: which arm of the Y should the root grow down? In one of the two arms she placed a fungal culture that produces volatile substances. Moisan tested the response of rapeseed to four different fungi, one of which was pathogenic. The results were surprising: the young plant was significantly more likely to grow towards the pathogenic fungus. Why? Moisan suspects that the plant is being tricked. The fungus misleads the plant, as it were, by releasing a pleasing aroma. Moisan calls this 'fatal attraction'. But this is a lab experiment where the plant only has the one choice. In real soil, there are lots of stimuli and the plant may then make different choices. RK