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## Selenium protects plants against insect damage

Insects avoid plants with high selenium content. The nutrient also protects plants against stress. In the May issue of *Beneficial nutrients news* a lot of selenium research is summarised.

Selenium protects plants against insect damage. Selenium containing substances in leaves and stems act as repellents, so that aphids, caterpillars and spider mites avoid these plants. Even in small amounts these substances are also toxic for these pests. American scientists have discovered this in experiments with alfalfa and cruciferous crops. From experiments with Indian mustard it appears that application of selenium can enhance resistance to fungal diseases. The researchers also found a snail species that prefers selenium rich parts of plants. In the May issue of the digital newsletter *Beneficial nutrients news* scientific journalist Gert van den Berg has summarised a lot of experiments with selenium.

### Less stress

Selenium also protects plants against stress. The nutrient is part of an enzyme that counteracts aggressive oxygen molecules; thus the selenium-containing enzyme protects chlorophyll from damage. Finnish scientists found this stress suppressing mechanism in potato, strawberry and other crops (read more on the website [www.silicon-nutrition.info](http://www.silicon-nutrition.info)). A lot of crops are sensitive to selenium excess. Cabbage and other cruciferous crops however take up large amounts of the nutrient.

### Fertilisation

The availability of selenium differs between soil type and region. High selenium levels make soils unsuitable for the production of feed and foodstuffs. In some other regions however soils are very low in selenium. In order to improve the nutritional value of feed and foodstuffs, Finnish NPK fertilisers for instance are supplemented with sodium selenate.

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Information: Gert van den Berg  
Van Maerlantstraat 5  
3906 EL Veenendaal  
The Netherlands  
[www.silicon-nutrition.info](http://www.silicon-nutrition.info)