Press release

16-06-2008 nr. 2008-01

Key words:
potato, tomato, bacterial diseases, silicon

Potato benefits from silicon supply

Silicon protects potatoes against bacterial diseases. This nutrient enhances the plant's resistance to bacterial wilt, blackleg and soft rot. Silicon can also reduce damage caused by drought stress, the scientific newsletter *Beneficial nutrients news* reports. Until recently, plant nutrition experts considered silicon application to potatoes to be fruitless.

Silicon enhances the resistance of potato to blackleg and soft rot. This nutrient stimulates the plants to make defence-related compounds in stems and tubers. In this way silicon suppresses the incidence of these widespread bacterial diseases. Soil applied silicon too induces resistance and tolerance to bacterial wilt (*Ralstonia solanacearum*) in potato and tomato. Silicon application can also reduce de severity of tomato bacterial canker caused by *Clavibacter michiganense*. According to research published in the June issue of the scientific newsletter *Beneficial nutrients news* (see www.silicon-nutrition.info) especially cultivars that are moderate sensitive to bacterial wilt may profit from silicon application.

Silicon nutrition can also improve crop growth under drought stress. Furthermore some silicon amendments improve the availability of phosphorous in soil. Until recently, plant nutrition experts considered silicon application to potatoes to be fruitless.

Roots usually absorb water that lacks silicon. Especially sandy soils contain little silicon in a form that can be taken up by the roots. Sandy soils are composed of quartz (silicon dioxide, SiO_2), but this material is so inert, that it is hardly if any available for crops.

Information: Gert van den Berg
Van Maerlantstraat 5
3906 EL Veenendaal
The Netherlands
Beneficial nutrients news
www.silicon-nutrition.info
press@silicon-nutrition.info