

## Beer maker SABMiller working with scientists to produce flood-tolerant hops

*[Editor's note: This excerpt was translated by Google Translate and lightly edited for clarity]*

Hops, one of the main ingredients of beer, is prone to flooding. Because many hops produced in areas with heavy rainfall, the quality and quantity of beer is increasingly threatened. ... Use of plants with increased tolerance to waterlogging could increase yields significantly, at no extra cost. Include beer producer SABMiller invested in research into how hops survives floods. It is working with scientists at the University of Nottingham, to see if they could make hops more tolerant to floods.

When plants are under water .... the plant switches over to a low-energy mode, in which the growth is suppressed and the fermentation is minimized. With this reaction ... can survive a plant hours or even days. If the flooding subsides, the plant can without much damaged resume its growth.

Research shows that when flooded, hops activate a gene that stops the rest reaction. By making use of advanced breeding techniques, researchers managed to develop transgenic hops in which this gene is deactivated. Consequently, the plant could his breath much longer than non-transgenic counterparts. In addition, the plant also appeared to maintain its photosynthesis ability, which means that the plant can resume its growth process after flooding subsided without damage.

**The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full post in original Dutch: [Business check-up: Transgene hop is bestand tegen water](#)**

**Read the full article in translated into English by Google Translate: [Business check-up: Transgenic hop is resistant to water](#)**