

Detergent keeps pathogen from destroying roses

September 17 2010, By Albert Sikkema

A major pathogen in roses, the mold *Botrytis cinerea*, can be easily kept at bay with a dash of chlorine. Dutch researchers discovered this by chance.

Botrytis causes big problems in [rose](#) cultivation. Every rose is infected by *botrytis* [spores](#) which have to be killed before transportation by ship or aeroplane to the consumer. Since the mold develops resistance to [herbicides](#) quickly, growers have come up with complex spray schedules using four or five substances to kill the mold.

Control substance turns out to be answer

Things can be much simpler, American and Wageningen researchers reveal this month in the journal *Postharvest Biology and Technology*. Ernst Woltering and American colleagues from UC Davis compared commercial substances for getting rid of *botrytis* in the laboratory. During the test, the researchers used a chlorine solution as the control substance. To their surprise, chlorine worked better than the other substances. A litre of water with a small dash of Glorix (one or two millilitres of household detergent) is all it takes, says Woltering. The chlorine kills the spores of the mold. 'If the plant is already infected by the mold, chlorine is useless.'

No patent

Woltering has in the meantime tested the use of chlorine in batches of roses transported in containers on ships. The use of chlorine has resulted in fifty to seventy percent less damage by botrytis. Moreover, the damage in affected roses is less severe, Woltering concludes from this study.

The researchers have discovered the positive effects of chlorine already two years ago, but wanted first to find out if they can apply for a patent for their discovery. 'But the answer is so terribly simple that it cannot be patented', says Woltering. 'Anyone can buy [chlorine](#) solution. The discovery cannot be protected. We have therefore decided to publish the outcome.'

Provided by Wageningen University

Citation: Detergent keeps pathogen from destroying roses (2010, September 17) retrieved 29 June 2024 from <https://phys.org/news/2010-09-detergent-pathogen-roses.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--