

How injecting genes into pea plants could introduce disease resistance and improve nutrition

Scientists are injecting genes into pea plants to speed up introducing better disease resistance and improving the nutrition of this pulse crop within the next five years.

Adding valuable genes from wild pea varieties from Africa and Asia is set to bring improved resistance to the potentially devastating disease downy mildew, with fungicide control being limited to seed treatments.

Researchers are also well down the path of improving the nutrition of combine peas both for human consumption and for animal feed to potentially reduce expensive imports of soya.

Claire Domoney at the John Innes Centre says speedier breeding techniques mean these new beneficial traits can now be introduced more quickly into farm crops.

“By injecting genes into pea leaves we can get a quick response on what reaction the genes have on the pea crop,” she tells Farmers Weekly.

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This method of gene injection is also helping researchers at the centre push for variety improvements quicker than with conventional breeding techniques, with the seed-to-seed production cycle down to just 37 days.

“Once we know which genes we need and follow up by introduce them into pea crops they could be with growers in five years,” says Prof Domoney.

Read full, original post: [Gene injection set to bring big benefits to pea crops](#)