

A new variety of pea (*Pisum sativum* L) resistant to powdery mildew infection

CSIC has cultivated by backcrossing a new variety of pea (*Pisum sativum* L), called Eritreo, resistance to powdery mildew infection caused by *Erysiphe pisi*.

Innovative industries interested in the developed and production are being sought to collaborate through a new variety licence agreement.

An offer for New Variety Licensing

Eritreo is resistance to *Erysiphe pisi* infection

Pea powdery mildew is an air-borne, worldwide-distributed disease caused mainly by *Erysiphe pisi* Syd. Pea breeding is based largely on the use of er1 resistance gene, with little use of the second available gene er2.

CSIC has identified a new gene for resistance to *E. pisi* so-called Er3.

CSIC has been able to introduce Er3 into *P. sativum* background by backcrossing and selection for resistance and fertility, resulting in the release of a resistant pea cultivar ("Eritreo") containing this gene.



Erysiphe pisi Syd. infection in field pea cultivars

Main innovations and advantages

- In order to extend the availability of sources of resistance, a germplasm collection has been screened resulting in the identification of quantitative and qualitative resistance to *E. pisi*.
- CSIC have identified sequence characterized amplified region (SCAR) markers linked to this gene that will facilitate the early selection of individuals carrying the gene in breeding programs.
- Genetic resistance is acknowledged as the most effective, economic and environmentally friendly method of control. The use of polygenic resistance or combining several major genes could enhance the durability of the resistance.

New Variety Status

New variety title has been granted

For more information, please contact:

Antonio Jiménez

Deputy Vice-Presidency for Knowledge Transfer.

Spanish National Research Council (CSIC)

Tel.: 915681930

E-mail: a.jimenez.escrig@csic.es
comercializacion@csic.es