

KIT FOR DETECTION OF POTYVIRUS

DISCLOSURE OF INVENTION

CSIC and other partner have developed a method for the detection and quantification of all species of the viral genus Potyvirus present in plant samples. The different species of the genus Potyvirus cause losses of up to 90% of production in crops of high economic interest, such as potato, maize or sugar cane. So far, the only way to identify that the crop was being attacked by a virus of the genus Potyvirus was to make specific detections for each species of the genus. With this new system it is possible to determine if in the samples coming from a culture there is presence of one of the 148 known species of the genus Potyvirus or of some unknown variant of these species.

In cultures affected by species of the genus *Potyvirus*, there may be different species of *Potyvirus*, because several of them may be transmitted by the same vector. This new detection kit recognizes highly conserved regions of the viral genome by which it allows to identify the presence of any of the species belonging to this genus, described and not described, and represents, therefore, a very attractive tool for any company of the sector. It is a detection kit with a high specificity for the genus *Potyvirus* and is carried out in a fast and simultaneous way, reducing the costs of detection and possible losses caused by the *Potyvirus*.

INDUSTRIAL APPLICATION SECTORS

The invention is applicable in the agro-food sector, the use of this new invention is for the detection of a fast, efficient and specific mode if crops are infected with any species of the viral genus Potyvirus.

TECHNICAL ADVANTAGES AND BUSINESS PROFITS

It is a kit of easy incorporation in companies of the sector, with a high sensitivity, specificity and capacity of sampling in a very reduced time.

- Simultaneous detection of the 148 known species of the genus Potyvirus and of the possible variants not yet identified.
- Method with high specificity and sensitivity.
- It reduces the time and economic cost of current virus detection methods in samples.
- Kit easy to incorporate by companies of the agri-food sector.
- Avoids the economic costs caused by losses un crops where false negative in viral detection

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DEVELOPMENT STATUS OF TECHNOLOGY

The technology described above is fully developed and can be used by any agri-food company that is interested in its use. The research group that has developed it has a wide experience implementing this type of detection systems in companies of the sector.

INDUSTRIAL PROPERTY RIGHTS

The technology for producing the compound with antibacterial activity is protected by patent.

TYPES OF COLLABORATION

Interested partners to establish Wanted:

- License Agreement, manufacturing or marketing.
- Companies interested in implementing this kit in their facilities.

RELATED IMAGES



Image 1: The use of this viral detection kit, avoided losses caused in crops.

CONTACT

Josep Calaforra Guzman
Delegación del CSIC en la Comunidad Valenciana.
C/ Cronista Carreres 11, 2º C
46003 Valencia.
Tel.: 96 362 27 57 ext.102
jcguzman@dicv.csic.es
www.dicv.csic.es