

AQUEOUS SOLUTION FOR THE PROTECTION AND STRENGTHENING OF PLANTS, INCLUDING ITS APPLICATION METHOD

<i>Offering Organization:</i>	Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C.
<i>Type of Organization:</i>	Public Research Center
<i>Development Stage:</i>	Pilot design stage without testing
<i>Desired Relationship:</i>	<ul style="list-style-type: none"> – Technological research and development financing (technological partner) – Specialized application tests – Creation of a new company (Joint Venture) for the commercialization of the products outlined herein – Licensing of patents
<i>Sector:</i>	Agro-Industry
<i>Area of knowledge:</i>	Agricultural Science
<i>Key words:</i>	Protection and strengthening of plants, agriculture, gardening, crops, cultivation

DETAILED DESCRIPTION:

Problem to be solved:

Create an aqueous solution for protecting and strengthening plants that is easy to produce and apply, lower in cost compared to other existing fertilizers, and is harmless to humans and other animal species.

Solution:

An aqueous solution that is made up of: polyethylene glycol, vitamin A (or a derivative, precursor, or mixture of vitamin A), and at least one type of red dye (which has a synergistic effect between its components). When applied, the solution protects the plants against factors which cause stress and helps them get better when they are in that state.

New and Innovative Aspects:

There is a shortage of solutions that, with just a few ingredients, are extremely effective in protecting plants against many biotic or abiotic factors that cause stress. Above all, there is currently no solution that immediately improves the health of the plant. All fertilizers help improve the health of plants but they are very slow, so the benefits of the fertilizer are not seen immediately.

TECHNICAL CHARACTERISTICS:

An aqueous solution used for the protection and enhancement of plants which is comprised of polyethylene glycol in a concentration of 2.0 to 10.0 grams per liter of the solution, vitamin A or a derivative including mixtures thereof, in a concentration of 0.1 to 10.0 grams per liter of solution, and at least one type of red dye that lets in light at wavelengths greater than 600 nanometers with a concentration of 0.1 to 10.0 grams per liter of the solution. The aqueous solution is extremely useful in preventing stress in plants from many biotic or abiotic factors as well as quickly improving the plants

wellbeing when it is found in a stressed state. The aqueous solution contains at least one glycoside, and / or at least one foliar fertilizer.

Main advantages derived from its utilization:

- Solution of very few substances
- Low cost
- Harmless to humans and other animal species

Applications:

- In stressed plants from bad handling
- In plants obtained by micropropagation
- In greenhouse seedlings
- In seedlings transplanted to the cultivation field
- In seedlings obtained by methods of germination of seeds and cuttings

INTELLECTUAL PROPERTY

- This technology is patent protected in Mexico, the United States, Canada, the United Kingdom, France and Germany.
- Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C. is the owner of said technology.
- Applications were submitted via PCT prior to 2004.

ABOUT THE OFFERING ORGANIZATION

Presentation:

El Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A.C. (CIATEJ) is a public research center that belongs to the national technology development and innovation network, the National Council for Science and Technology (CONACyT). CIATEJ is focused on the agricultural, food, health, and environmental sectors with an emphasis on the application of innovative biotechnology.

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