USE OF ENTOMOPATHOGENIC NEMATODES IN A CHITOSAN FORMULATION AGAINST RHYNCHOPHORUS FERRUGINEUS IN DIFFERENT PALM SPECIES. FIELD ASSAYS AND SPECIFIC CASES IN A CITY AND IN A BOTANICAL GARDEN.

The objective of this paper was to collect all information regarding the use of S. carpocapsae mix with chitosan in palms (Bionem R palmeras), which has been proven to be highly effective against R. ferrugineus in the field. We will summarize four scientific publications, and we will study the specific cases of Valencia's Botanical Garden and the Spanish city of Ceuta, located in Northern Africa, to observe the plague control and evolution. Valencia has used this combination continuously for four years and the city of Ceuta two years.

The assays reported in this study by LACERCA et al. (2009) were carried out at the Institute of Veterinary Investigation Agraneto (IVIA) in Spain during the months of June, July and August 2007. Trials were performed in a double mesh system containing two plants at the end of the rib, two plants at the base of the rib and three plants in the wall. The mean temperature during the assay was 23°C (min: 21°C; max: 25°C). Curative and preventive efficacy of S. carpocapsae in a chitosan formulation were evaluated 15 and 72 days after application of the treatment.

Philodendron and curative assays in R. dactyliced were developed in Beirut (Aoun IV, DEMELZI et al. 2008) with the objective of evaluating the potential of curative and preventive efficacy in this species. The experiments were carried out in 2008 and 2009 under field conditions. Chitosan and nematodes were applied at selected periods during the growing season. The nematodes were applied to the rhizosphere of young plants with a concentration of 10⁵ adult nematodes in 40 ml of water per plant. The experimental area was divided into five different treatments: three replicates of 10 plants each, and one control (no application). The plants were maintained in the greenhouse until observation of adult emergence. The nematodes were recovered and evaluated under microscope.

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The present report outlines the control and elimination efficacy against the red palm weevil in Ceuta since the beginning of November 2008. The work began as a joint project of the CEUTA CITY HALL, the Landmarks in Greece such as the National Gardens, Zeppelin Palace and the Field of Mars in Athens, have been treated their palms and the control of nematodes with chitosan.

The results show that chitosan is the optimal formulation that has been tested to date. It is observed that chitosan is highly effective against the red palm weevil. As the research progresses, we will see an increasing interest in the use of this substance in the field of pests control.

Since March 2011 and after making changes to protocol, if it not think that the nematodes are particularly effective against the red palm weevil, the RPW while the plants are not fought by the nematodes. In the third period, the red palm weevil population decreases from 92% to 50% Biorend R treatments. The new infestations. These affected palms are currently progressing favorably.

The evaluation was made on May 2012, and the control results taken into account. The results confirm that the biological control method is effective and can be used in the field. The results confirm that the biological control method is effective and can be used in the field. The results confirm that the biological control method is effective and can be used in the field. The results confirm that the biological control method is effective and can be used in the field. The results confirm that the biological control method is effective and can be used in the field.