

Detection of bacterial pathogens causative leaf blight of onion (*Allium cepa* L.) by indirect elisa in Lara State, Venezuela.

Mildred Valles, Nancy Contreras y Norma Gómez. Universidad Centroccidental Lisandro Alvarado, Cabudare, Estado Lara, Venezuela. nacon99@yahoo.com

In Lara state, Venezuela, area of more production in onion (*Allium cepa* L.), there are different problems that limit productivity, among those the diseases denominated "Bacteriosis" or leaf blight of onion. The objective proposed was to standardize the indirect ELISA protocol for to detect the bacteria *Pseudomonas viridiflava* (Pv), *Pantoea ananatis* (Pa) and *Xanthomonas axonopodis* pv. *allii* (Xa pv *allii*) Were reactivated with nutrient broth and water peptone to 4%, growing in nutritious agar and in differentials medium. and was inoculated in healthy plants of onion to reactivate their virulence. The injection of the flagellar antigens was done in New Zealand rabbits, which polyclonal antibodies produced against the bacteria. With the tube agglutination test were determined the titles of the antiserums, which were of 1:20480 for Pa and Xa pv *allii* and of 1: 40960 for P v. The immunoglobulin were purified using the method of partial purification, selective precipitation with high concentration of salts of ammonium sulfate and by using the test of antibodies with the antigens of Pv and Pa, which was eliminated applying the cross absorption test. The technical indirect ELISA detected bacterial concentrations of 10^5 - 10^6 cell.ml⁻¹. It is concluded that was standardized the indirect ELISA protocol and was validated for the detection of the bacteria Pv 77,45% , Pa 65,69% and Xa pv. *allii* 39,22% in Iribarren municipality respectively; Pv 5,66%, Pa 52,83% and Xa pv. *allii* 51,87%, in Jimenez municipality respectively.