

## **Researching on Rhizobiology in Peanuts (*Arachis hypogaea* L.): 1. Studies in Pots**

**S. SANCHEZ-DOMINGUEZ\*** and M. LEMUS, Departamento de Fitotecnia, UACH, Chapingo, Edomex, 56230; and N. PUPPALA, New Mexico State University Agricultural Science Center, Clovis, NM, 88101.

In Mexico peanut inoculation with Rhizobium, is not common and neither chemical fertilizer applications, so, the objective of this research was to determinate the effect of three different sources (Vault, Optimize, Agribest, and a control) of Bradhirizobium and rhizobium, on peanuts yield components. Twenty four pots were filled with clay- sandy soil. Peanut variety Mahue (bunch), was planted on May 10, 2016. Each rhizobium source (treatments) was applied, on commercial dosages, to soil in 6 pots. Statistical differences among treatments, were not found. Tukey test showed that Vault was the best in peanut yield ( $18.7\text{g pot}^{-1}$ ); however Optimize underlyed on the next peanut yield components: plant diameter (29.5 cm); leaf number per plant (373); leaf weight (24.3 g); Immatute fruits number (19.2); shoot dry weight (15.1 g) and root dry weight (13.5 g). Vault was the best rhizobium treatment in: plant height (16.6 cm); mature fruit number (16) and dry fruit weight (18.7 g). Agribest, a rhizobium recommended for dry beans, was always, the third treatment in most traits measured.