Abstract
We have evaluated the adjuvant activity of rice oil (RO) on the immune response to ovalbumin (OVA), its depots and possible side effects at the injection sites. Immunization of mice with OVA emulsified in rice oil (OVA+RO) resulted in an antibody response significantly higher than that determined in mice immunized with soluble OVA. In addition, these high antibody levels were observed for a period as long as 6 weeks after immunization. However, the adjuvant action of RO was significantly lower to incomplete Freund's adjuvant (IFA). In secondary immune response, the pattern of OVA-specific antibodies stimulated by RO was predominantly IgG1. Despite of the significant humoral response enhanced by RO at no time was noted any lesions at the site of injection. Besides, histological analysis showed that inflammatory reaction caused by RO was mild and transient, suggesting that RO appears to be a safe, effective and chemically define alternative to IFA in many situations.

Keywords
Rice oil, adjuvants, antibody response, vaccine, cytokines.