

**Determination of optimum conditions for pectinesterase extraction from soursop fruit
(*Anona muricata*) using response surface methodology**

ABSTRACT

Optimum conditions for the extraction of pectinesterase from soursop (*Anona muricata*) have been established. A fractional factorial design and response surface methodology was applied in this study, as a means of improving the method for developing an enzyme extraction procedure. Among the variables tested, NaCl and pH showed greater significant effects, while PVP, EDTA and incubation time seemed to have a lowering effect on the efficiency of pectinesterase extraction from soursop. The maximum enzyme extraction was obtained by using 1.92 M NaCl solution at pH 8.4.

Keyword: *Anona muricata*; Pectinesterase extraction