Abstract
The change in the Eberhart and Russell stability parameters was evaluated, when alternate combined family selection was applied in three tropical maize populations. Yield trials were conducted with the selection composites derived from each population, in two agricultural cycles, Fall-Winter (cycle A) and Spring-Summer (Cycle B), in six localities of the coastal zone in the State of Veracruz, from 1988 to 1990. The selection process promoted changes in the regression coefficients (bi); in populations 1 and 2 bi increased and in population 3 it decreased. Most of the selected composites of the three populations were ubicated as stable varieties or varieties with good performance in all environments, but unpredictable. These results suggest that the stability was improved during the selection process.

Keywords
Zea mays, family selection, tropical varieties, stability parameters