Morphometric analysis of Oryctes rhinoceros (L.) (Coleoptera: Scarabaeidae) from oil palm plantations

ABSTRACT

Morphometric analysis was performed on the oil palm pest Oryctes rhinoceros (L.) as part of a study to determine the possibility of a cryptic species complex occurring in this organism. Six beetle populations, each with a sample of 30 individuals, were examined. The morphometric variables measured were total body length, elytral length, pronotal length, pronotal width, and length of the cephalic horn. Principal component analysis and canonical discriminant analysis indicated no distinct discontinuity or clustering of populations. The morphology of individuals from different populations was observed to overlap on one another. These results indicate that O. rhinoceros show stability in morphometric character variance across a wide geographical range.

Keyword: Asia; Cryptic species complex; Morphology; Rhinoceros beetles.