

Breeding of maize for acid soil tolerance

ABSTRACT

Maize is one of important crops which is utilized in a wide variety of human food, animal feed and raw materials to industrial product around the world. In the tropics, maize is usually planted in acidic soils and it's yield is unsatisfactory in the soils. Planting maize hybrid varieties tolerant to acid soils along with the use of sustainable agronomic practices offers an effective strategy for improving maize productivity in acidic soils. This book describes the process to produce and select maize hybrids tolerant to acidic soils. This book covers the heterosis of single cross hybrids and combining ability of their parental inbred lines evaluated in acidic soils, and heritability estimates from the hybrids populations. This book also covers the use of SSR markers to predict heterosis and hybrid performance. It is hoped that the findings from the study may help maize breeders to produce new hybrid varieties having high yielding potential and tolerant to acid soils.

Keyword: Maize; Acid soil; Food; Sustainable agronomic