Agricultura Técnica en México
ISSN: 0568-2517
contacto@agriculturarecnica.net.mx
Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias
México

Valdivia Bernal, Roberto; Caro Velarde, Francisco de Jesús; Ortiz Catón, Margarito; Betancourt Vallejo, Alberto; Ortega Corona, Alejandro; Vidal Martínez, Víctor Antonio; Espinosa Calderón, Alejandro

Desarrollo participativo de híbridos sintéticos de maíz y producción de semilla por agricultores
Agricultura Técnica en México, vol. 33, núm. 2, mayo-agosto, 2007, pp. 135-143
Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias
Texcoco, México

Abstract

The model ´Farmer-Researcher´ (F-R) was applied by a group of farmers in Santa María del Oro, Nayarit, Mexico with the aim of developing their own maize hybrids and its seed production, in order to reduce production costs. The F-R model is a participatory process between farmers and researchers that involves research, technology transfer and adoption activities. The model was applied during 1996- 2000 at Buckingham and neighborhood communities. In 1996, the farmers compared 10 commercial maize hybrids with two synthetic hybrids obtained from crosses between commercial F1 hybrids. The agronomic characteristics and yield shown by the synthetic hybrids convinced the farmers to form eight new synthetic hybrids from crosses among the commercial hybrids: HV-313, D-880, C-385 in the generation F2, P-3028, A-7573, D-867 and Ciclón. The farmers selected one hybrid and named it B-2002. The performance of B-2002 was similar to the best commercial hybrids sown at the region: P-3028, A-7573 and H-359; therefore, the seed of B-2002, produced by farmers, had an increasing demand. In 1998, 1999 and 2000, B-2002 was used in 1000, 1500 and 3500 ha, respectively. The application of the farmer-researcher model demonstrated that farmers, advised by a researcher, were able to develop maize hybrids and to produce their own seed at a lower cost than the commercial hybrid seed.

Keywords

Zea mays L., advanced generations, farmerresearcher, on farm strip trails, participatory plant breeding.