Abstract

The population in Valle de México has historically created a great diversity of agricultural and livestock production systems, among them chinampas and rainfed agriculture in terraces; these are sustained in traditional knowledge, domestication and recreation of an important biological diversity. However, during recent decades, extreme urban transformations have impacted agricultural territories, generating changes and adaptations in the existing cultivation systems. With the objective of evaluating the biodiversity managed in cultivation systems and their interparcel spaces, as well as its use, research was carried out in three communities of the Texcoco River Basin, taking into consideration their location with regards to the urban zone (Texcoco). A survey was applied to 33 farmers, who jointly manage 47 cultivation systems. Single crops and polyculture were identified; the latter show associations and intercalation, combining maize, squash and grain pulses. The Shannon diversity index in Ixayoc was 3.65, in Tequexquinahuac 3.57 and in Nativitas 3.25; the greatest diversity was found in territories that are farthest from the urban zone. In parcels, 50% of biodiversity was weeds; the rest was annual crops, fruit trees, trees, shrub and ornamental plants. Biodiversity and polyculture management tends towards valuation of the dietary use of products and weeds, based on productive logics sustained in certain peasant agro-ecological principles.

Keywords

agriculture, maize, polyculture, single crop, urbanization.