

Agricultural dynamics of Saharan oasis and its influence on agro-biodiversity: Case study of palm date farms in Ouargla (Algeria)

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ABSTRACT:

Palm dates farms in Ouargla (Southern Algeria), has experienced a very important agricultural dynamics in space and time. Nowadays, there is an obvious deterioration in plant genetic resources, especially, for indigenous seeds and local dates palm cultivars. Our work is inspired by three farming systems namely the old oasis, its extension and the new land farm developed reclaimed.

The results of this study showed the predominance of two so-called commercial varieties (Deglet Nour and Ghars). However, the so-called common varieties representing the genetic diversity of date palm present significantly at lower percentages; 11.70 % for old oasis; 7.45 % for extension of old oasis and 3.56 % at the new land developed. For the seeds we have identified, 28 species crossed locally. The new system presented the lowest percentage with only one farmer producer of seed.

The ancient oasis and its extension concealed until now, an indisputable agro-biodiversity which must be preserved. Unfortunately, there is low flow of knowledge and phytogenic resource transfer from ancient to new system. The notion of plant genetic erosion is discussed as well as recommendations and perspectives are proposed.

Keywords:

Cultivars, Erosion, Farming systems, Local seeds, Knowledge.