World Academy of Science, Engineering and Technology
International Journal of Agricultural and Biosystems Engineering
Vol:9, No:05, 2015

Cultivation of Stenocereus Spp. as an Option to Reduce Crop Loss Problems in High Marginalization States in Mexico

Authors : Abraham Castro-Alvarez, Luisaldo Sandate-Flores, Roberto Parra-Saldivar

Abstract : The losing of crops during the whole production process is a problem that is affecting farmers in the whole world, as climate change affects the weather behavior. Stenocereus spp. is a tropical, exotic and endemic columnar cacti, it produces a colored and expensive fruit known how “pitaya”. The quality and value of the fruit, these species represent an attractive option for economical development in arid and semi-arid regions. This fruits are produced in Mexico, mainly in 4 regions, Mixteca Oaxaca-Puebla, Michoacan, Sinaloa-Sonora, Jalisco-Zacatecas. Pitaya can be an option to try mixed crop in this states due to the resistance to hard weather conditions. And also because of the marginalization problems that exist in these townships. As defined by the Population National Council it consists in the absence of development opportunities and the lack of capacity to get them. According to an analysis done in EsriPress ArcGis 10.1 the potential area in the country is almost the half of the territory being the total area of Mexico 1,965,249 km2 and the area with potential to produce pitaya 960,527 km2. This area covers part of the most affected townships that also have a few options of maize varieties making even harder the production of maize and exposing farmers to crop losing if conditions are good enough. Making pitaya a good option for these farmers to have an economic backup in their productions.

Keywords : maize, pitaya, rain fed, Stenocereus
Conference Title : ICAFUS 2015 : International Conference on Agriculture, Food and Urbanizing Society
Conference Location : Amsterdam, Netherlands
Conference Dates : May 14-15, 2015