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Title

**The role of biodiversity, management of pests and diseases
in the damage and to assess the relative performance using
economic models fit in the palm city of Bam**

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Abstract

In order to evaluate the role of biodiversity, different managements in the amount of pest and disease damage and to measure relative efficiency using appropriate economic models in Bam province, this research was carried out in the years 2000-2006 in the eastern region of Kerman province. In this study, estimation of species diversity was calculated using Jenkaiy estimation. To determine the extent of damage to pests and diseases, 15 species of trees were randomly selected from the palm trees. The Machacek method was used to study the severity of infection of each of the pathogens and pathogens. Finally, the economic efficiency of farms was analyzed. Based on the results, it can be stated that the use of different species (Pomegranate + Mazafati) together to improve the quality and quantity of the main plant, empty hangings to produce another product, and reduce the presence and dominance of weed species With more restrictions. It should be noted that the use of different species in terms of growth type has reduced the variance indexes of Shannon Wiener, Simsson and AAF Fisher. But in overcoming the species was the result of the image so that the pomegranate and Mazafati had the highest levels of weed control. Among the correlation coefficients of different management with pruning pests and the use of median work by different tree species, the most control was observed on pest, mite, pollen worm, fruit-eating worm, tall tops and beetroot cockroaches. But the highest correlation with the infection rate of Khamaj disease and fruit caries was due to pruning and fertilizer variables, respectively.

The average total technical efficiency of palm farms in four counties was 63%, with the least performance related to units produced in the city of Narmashyr. Also, the range of technical efficiency of the date farm farm (the gap between the most efficient and most inefficient unit) is high in the above areas. The average technical efficiency of palm farms is divided into three large, medium and small farms, with a minimum yield of large palm farms of 38 percent. The average technical efficiency of the city of Narmashir in large farms compared to other farms of the city is from efficiency The main reason for the inefficiency of these farms is the lack of management, which leads to a reduction in the efficiency of large farmed farms. In the whole of the city of Narmashyr, there is a low efficiency at the level of studied regions. The results indicate that small towns producing small-scale production units with a mean 88% technical efficiency compared to production units of the cities are more efficient, which can be achieved by transferring technical know-how and management of efficient units to these fields. Based on the results obtained, the factors affecting the technical efficiency of the quill are estimated coefficients of poisoning, water consumption, mixed cultivation, participation in training classes and investment in significant production units, indicating that a one percent increase in investment leads to an increase in efficiency It is expected to increase the economic efficiency of production units of the studied area by increasing the variables of participation in training classes, investment and mixed cultivation (dates and other products). Other factor that was analyzed on efficiency were factors such as farmer's record, land size and chemical pesticides, which had no significant effect on the technical efficiency of the units.

Keywords: natural enemies, density, population pest, damage