

# 3<sup>rd</sup> International Conference on Earth Science & Climate Change

July 28-30, 2014 DoubleTree by Hilton Hotel San Francisco Airport, USA

## The effects of climate change on the date palm productivity at Biskra Oasis, South Algeria

Tarai N, Mihi A and Belhamra M  
University of Biskra, Algeria

The date palm is the basis for an important economic activity at Biskra Oasis. Indeed, currently the date palm plantations extend the Algerian Sahara on nearly 160,000 hectares with nearly 15 million palm trees. Date palm has an important role in protecting the screen against the desert oasis influences and creates a favorable microclimate for the development of horticulture underlying. Palm tree produces an average of 24 palms per year from 10 to 20 inflorescences and up to 200 kg dates. To provide good date production, palm grove needs between 16,000 to 20,000 m<sup>3</sup>/ha/year, depending on soil type, depth of the water, the degree of insolation and temperature. Climate change affect the seasonal distribution of rainfall, the study at Biskra Oasis for 23 years, since 1990 to 2013 shows that during the end of the last century the most rainfall occurring in the autumn (37.43%) and winter (39.24%), while during the end of the first decade of this century, most of the rainfall occurs in winter (33.31%) and spring (37.12%). This new distribution of precipitation affects fecundation and production dates.

### Biography

Tarai N is a Doctor of Agricultural Science and received his diploma at the National School of Agricultural Sciences in Algiera. Currently, he is a Lecturer and Chairman of the scientific committee of the Department of Agronomy, Faculty of Sciences and Natural Sciences and Life, University Mohamed Khider Biskra, Algeria.

[tarainacer@yahoo.fr](mailto:tarainacer@yahoo.fr)