



XIV GREMPA, ATHENS, HELLAS 2008
XIV Meeting of the Mediterranean
Research Group for Almond and Pistachio
ACROPOL HOTEL, ATHENS, GREECE
30 MARCH - 4 APRIL 2008

ORGANIZED BY
 The Agricultural University of Athens Greece
 NAGREF Greece
 Technological Education Institute of Kalamatas Greece
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Dear colleagues

The organizing committee of the XIV GREMPA MEETING is very pleased to announce that the main arrangements for the organization are nearly completed. Over 120 scientists from 16 countries all over the world have already registered or declared that they will attend the Meeting, which will take place in Acropol Hotel Athens, Greece between 30 March - 4 April 2008.

Looking forward to welcome you in Athens
 On behalf of the local organizing committee

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AN EVALUATION OF THE CHANGES IN PROLINE AND NUTRITIONAL ELEMENTS IN FLWER BUDS OF PISTACHIO CULTIVARS

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In northern areas, spring low temperature is the major environmental factor limiting the productivity of pistachio, loss of quality as well as quantity. Cold hardiness, defined as the ability of plants to withstand sub-freezing temperatures without sustaining significant damage, is an important criterion for evaluation of the cultivation potential of a species or cultivar, and for breeding or selection work. In other fruit trees, a direct correlation has been shown between cold resistance and the deposited content of proline and nutritional elements in flower buds. The present study, designed as split-plot with the time of sampling as main plots and the pistachio cultivar (akbari,ahmad-agmaie,kaleh-ghouchi and ouhadi) as sub-plots, with 3 replications was conducted in Ferdowsi University of Mashhad and Iranian Pistachio Research Institute. The content of proline and nutritional elements in flower buds through dormancy and in flowers, as well as carbohydrate content of female flower buds were measured. The results show a reduced content of proline and nutritional elements through bud dormancy and an elevated content by its swelling and flower opening.

Key words: flower buds, carbohydrate content, proline