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The main challenge for the modern food and agricultural sectors is to simultaneously provide enough food, in quantity and quality, to meet nutritional needs of a growing world population and to conserve the limited natural resources for present and future generations. FAO estimates that to meet the food demand of a growing and more affluent population, food production should increase by at least 60 percent by 2050.

Changes for optimizing both food consumption and food production are important to move towards more sustainable food systems and to achieve food and nutrition security. Fostering the necessary changes implies designing and implementing appropriate policy instruments based on sound and accurate scientific knowledge. Closing the knowledge circle and making agricultural knowledge available for and accessible by all the relevant stakeholders is of utmost importance for achieving transition towards sustainable food production and consumption.

The International Scientific Symposium “Agrosym” is, since four years, an annual platform for international scientific discussion on agriculture, food, rural development and environment. Agrosym represents a good opportunity to exchange ideas, to strengthen existing and to create new academic networks, and to foster dialogue between the academia, public institutions, the private sector and civil society organizations on the recent global and regional trends in the agro-food sector. The fourth edition, Agrosym 2013, focuses on six thematic areas: plant production, plant protection and food safety, organic agriculture, environmental protection and natural resources management, animal husbandry, and rural development and agro-economy.

Agrosym 2013 has all the ingredients for a real success. Full papers submission exceeded any expectation. Overall, more than 300 contributions were submitted by scholars and practitioners from 38 countries (Albania, Algeria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Egypt, Finland, Germany, Ghana, Greece, India, Indonesia, Iran, Iraq, Italy, Japan, Kazakhstan, Lebanon, Republic of Macedonia, Malaysia, Montenegro, Morocco, Niger, Pakistan, Poland, Romania, Russia, Serbia, Slovenia, South Africa, Spain, Slovakia, Tunisia, Turkey, Ukraine, Vietnam). We are so happy that we have been able to get such a broad participation of scientists, researchers, practitioners, students, policy makers, private sector actors, NGO representatives from three continents.

This publication includes all accepted abstracts. We are convinced that this input will contribute to a more effective dissemination of fresh knowledge to academicians, practitioners and the wider audience about important issues regarding agriculture, food, environment and rural development.

We would like to express our sincere appreciation and gratitude to the invited speakers and to all participants. Moreover, we are very grateful to all people who have worked hard for organizing Agrosym 2013 and making it successful from any standpoint. Finally, we would like also to express our genuine gratitude to the sponsors for their valuable support.

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Abstract

The object of this research is propagation through green macro explants derived from the apical segment of the sprig in the variety “Kaninjot, Mixan, Bllanic and Himara. The parts were treated with Indole-3 Butyric Acid, 1g l⁻¹, 3g l⁻¹, 5g l⁻¹ and Control in four phases of the meristematic development; February (½ asleep), May (active), September (active) and December (asleep).

Thermal regimes 24°C/18°C (±1 °C), the mist technique was applied according to Photosynthetically Active Radiation 5 sec/11-13 k.kal/cm².

After 70 days, the percentage of rooting of studied cultivars varies from 23 to 90%. The two IBA dosages have not affected rooting in the same way within each period. IBA at 3 g l⁻¹ and 5g l⁻¹ gave high rooting percentages for Kaninjot and Mixan cultivars. At high cambial activity, the IBA concentration of 3g l⁻¹ resulted more effective; whereas under conditions of low cambial activity, high IBA concentrations yielded better results. At active vegetation stage the IBA in high concentrations shows inhibitory and toxic effect. The concentration of 1gl⁻¹, had weak reactions and was inefficient. The control gave low rooting percentage and with significantly highlighted changes compared to IBA treatments. Cultivars have their highest endogenous rhizogenic capacity in May and September, period which corresponds to the active cambium activity. Defoliation has varied between 8.3 and 14.1%. The presence of the leaves has been a stimulating factor for rooting (r²=0.93). The number of roots has increased in parallel with the increase of concentration, (r²=072).

Keywords: Olive, cultivars, mist-propagation, explants, hidrooalcoholic, culture.