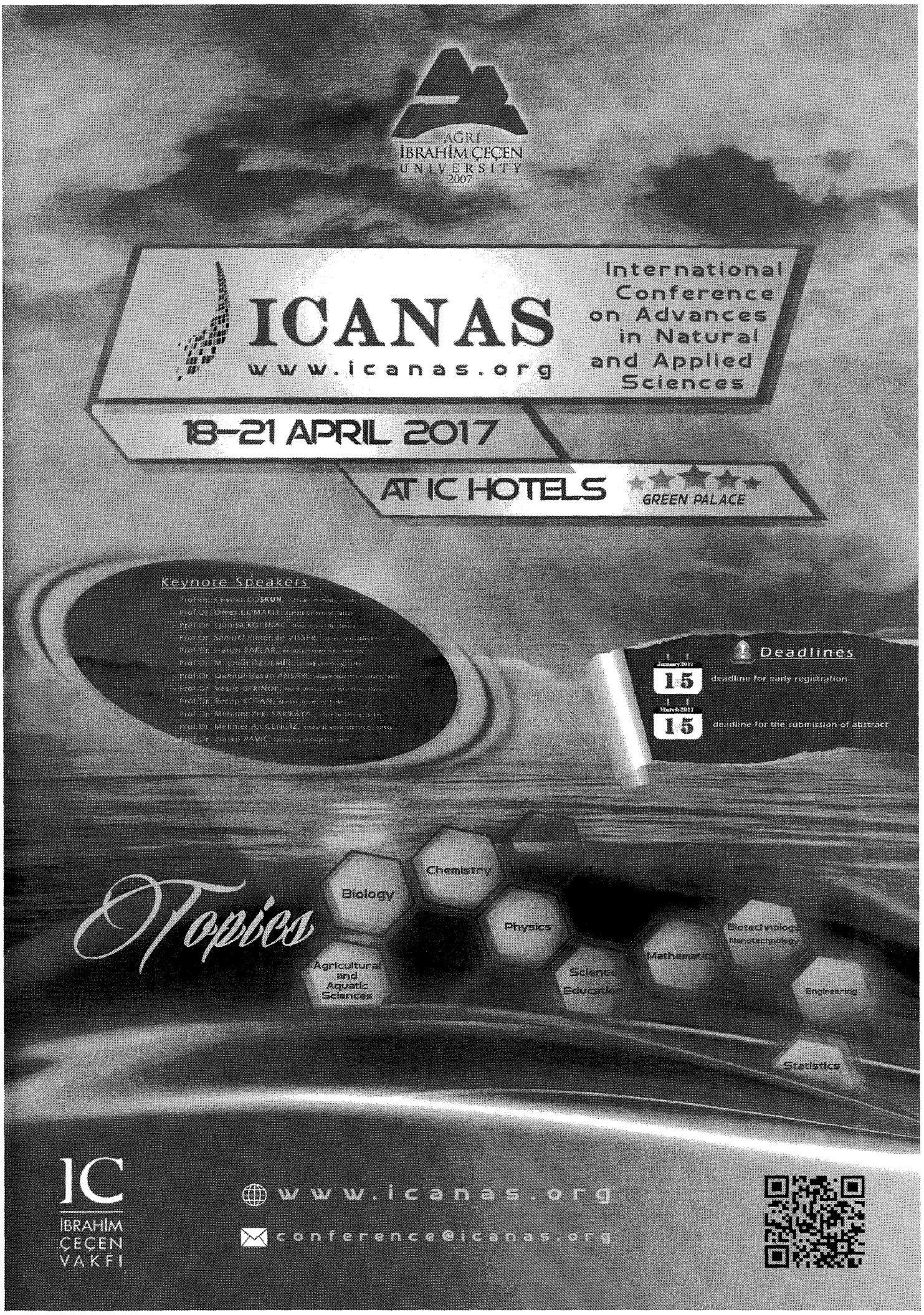
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The Effect of Some Plant Hormones on Formation of Callus on Sainfoin (*Onobrychis sativa* L.)

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ABSTRACT

This study prepared was carried out determining plant growth hormones (PGH) (NAA, BAP, KIN and TDZ) on formation of callus on the sainfoin plants (*Onobrychis sativa* L.) grown in in-vitro conditions. This study which is applied 42 different methods was performed in two stages. In the first stage, the seeds were sprouted in hormone-free environment. In the second stage, the explants (cotyledon, root and hypocotyl) obtained from the plantlets were transferred to the environments including different hormone, dose and hormone-dose combinations. For the effect of plant growth hormones, the highest rate of callus formation (98,4%) with the dose combination 0,2 mg/l NAA+1,5 mg/l TDZ and 0,4 mg/l NAA+0,5 mg/l TDZ from the root explant was obtained. The highest number of embryogenic callus formation (9,5 nr) from the dose 1,0 and 1,5 mg/l of BAP and the highest number of somatic embryo per explant number (3,4 nr) from the dose 0,4 mg/l NAA+1,5 mg/ BAP were obtained.

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