

## عنوان مقاله:

Effects of plant growth regulators and organic compounds on callus induction and plant regeneration in wheat (*Triticum aestivum* L.) using mature embryos

## محل انتشار:

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## خلاصه مقاله:

To establish a highly efficient plant regeneration system for some Iranian wheat, this study was done. MS mediums supplemented with different combinations of 2, 4-D, NAA, Dicamba, and different combinations of Thidiazuron and BAP, were evaluated for callus induction and regeneration respectively. The results showed that the efficiency of mature embryo for tissue culture response was significantly influenced by the genotypes, the auxins types and concentrations. Medium supplemented with 2 mg/L Dicamba give the best response on callus inducing and also gave the highest rate of plant regeneration. Regeneration response mainly affected by auxins types and concentrations on callus induction medium. There was no significant effect of cytokinin treatments on regeneration properties. Three different organic compounds were used to improve callus induction and plant regeneration response of elite cultivars. The results showed that the Casein hydrolyzed at 3 g/L and Tryptone at 5 g/L had greatest impact on callus induction and plant regeneration of wheat respectively.

## کلمات کلیدی:

callus induction, casein hydrolyzate, Mature embryo, plant regeneration, Trypton and yeast extract

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1496094>

