



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**Effects of Different Media, Type and Concentrations of Auxin on Callus
Induction and Plant Regeneration from Young Inflorescences of Yellow
Bluestem (*Bothriochloa ischaemum*(L.) Keng)**

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Ersin CAN Mustafa Kemal Üniversitesi, Ziraat Fakültesi, Tarla Bitkileri Bölümü, Hatay - TÜRKİYE Rüştü HATİPOĞLU Çukurova Üniversitesi, Ziraat Fakültesi, Tarla Bitkileri Bölümü, Adana - TÜRKİYE Abstract : This study was conducted to determine the effects of different media, auxin types and concentrations on callus induction and plant regeneration from young inflorescences of 15 ecotypes of yellow bluestem (*Bothriochloa ischaemum*). The young inflorescences were cultured on two different basal media (LS and SH) containing different concentrations (2, 4, 6, and 8 mg/l) of two different auxins (2, 4-D and Dicamba). The results showed that the ecotypes were significantly different from each other in callus induction rate, callus weight per dish and regenerate number per inflorescence segment. Depending on the ecotypes, mean callus induction rate varied from 9.7% 51.6%, mean callus weight per dish from 95.6 to 414.6 mg and number of regenerates per inflorescence segment from 0 to 2.2. LS medium resulted in better callus induction, and callus weight and regeneration than SH medium. While the media with 2,4-D produced higher callus induction and callus weight than those with dicamba, the media supplemented with dicamba produced more regenerates per inflorescence segment than those with 2,4-D. The highest value for both callus induction and callus weight was obtained at 4 mg/l 2,4-D concentration. However, the highest plant regeneration was recorded at 8 mg/l dicamba concentration.

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