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Role of nutrients on biochemical changes in various growth stages of watermelon

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ABSTRACT : An experiment was conducted to find the effect of different levels of nutrients through water soluble fertilizers along with Azophosmet and humic acid on biochemical attributes of watermelon. Application of 125 per cent of water soluble fertilizers *viz.*,250:125:125 kg/ha of NPK in addition to Azophosmet and humic acid showed the best performance in almost all the parameters studied in both seasons I and II, as it recorded the highest total chlorophyll content (1.588, 2.574, 2.426 and 2.162 mg g^{-1} in season I and 1.652, 2.638, 2.556 and 2.379 mg g^{-1} in season II, T_8 recorded the highest soluble protein content (6.02, 11.66, 11.19 and 8.42 mg g^{-1} in season I and 6.18, 12.24, 11.58 and 9.14 mg g^{-1} in season II, nitrate reductase activity at all days observed during both seasons *viz.*, season I and season II (9.29, 16.89, 14.0,9.11 µg NO_2 g^{-1} h^{-1} and 9.74, 17.24, 14.35 and 9.46 µg NO_2 g^{-1} h^{-1} at 30th, 45th, 60th and 75th DAS. IAA oxidase was the highest at 30th DAS and declined at 45th, 60th and 75th DAS in both the seasons.

KEY WORDS : Watermelon, Water soluble fertilizer, Azophosmet, Humic acid, Chlorophyll content, Soluble protein content, Nitrate reductase activity, IAA oxidase activity

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