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5

The Role of Gibberellin against Abiotic Stress Tolerance in Plants

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CONTENTS

5.1 Introduction

Global climate change has made agriculture vulnerable to various abiotic stresses. The negative effect of climate change is observed as frequent extreme weather events. Such events are expected to affect food and nutritional security. Considering the fact that the global population is expected to reach 9 billion by 2050, addressing the issue of food security in the face of climate change is very important. Abiotic stresses are expected to rise; hence understanding their impact and developing a coping strategy needs attention (Adnan et al. 2018, 2019, 2020; Ahmad et al. 2019; Akram et al. 2018a,b; Aziz et al. 2017a,b; Baseer et al. 2019; Depeng et al. 2018; Farhana 2020; Frahat et al. 2020; Habib et al. 2017; Hafiz et al. 2016, 2018, 2019, 2020a,b; Hussain et al. 2020; Ilyas et al. 2020; Jan et al. 2019; Kamaran et al. 2017; Mubeen et al. 2020; Muhmmad et al. 2019; Qamar et al. 2017; Rehman 2020; Sajjad et al. 2019; Saleem et al 2020a,b,c; Saud et al. 2013, 2014, 2016, 2017, 2020; Shafi et al. 2020; Shah et al. 2013; Subhan et al. 2020; Tariq et al. 2018; Wahid et al. 2020; Wajid et al. 2017; Wu et al. 2019, 2020; Yang et al. 2017; Zafar-ul-Hye et al. 2020a,b; Zahida et al. 2017).

Plants face various kinds of abiotic stresses that may retard the growth and productivity of crops. Those include high or low temperature, high salinity, drought, waterlogging, submergence, and so on.