

Potential of plant's Bowman-Birk protease inhibitor in combating abiotic stresses: a mini review

ABSTRACT

Bowman-Birk Inhibitor (BBI) is one of the subfamilies of serine protease inhibitors. Numerous studies have shown that in plants, BBI functions as part of their defense mechanism against pathogens and microorganisms. The BBI is also known to have anti-carcinogenic properties. Furthermore, the BBI has been reported to function in controlling abiotic stresses such as salinity and drought stresses. Abiotic stresses are the major problems in agricultural industry. Therefore, numerous researches have been carried out to characterize the BBI and to determine its roles during biotic and abiotic stresses. This paper presents a review regarding the relationship between Bowman-Birk inhibitor and the plant defensive mechanism against abiotic stresses.

Keyword: Bowman-Birk inhibitor; Abiotic; WRIS5; Oxidative stress