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Plant annexins and their involvement in stress responses

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Highlights

- Annexins are an evolutionarily conserved family of proteins that are known to be involved in important biological processes such as membrane trafficking, cytoskeletal organization, cellular homeostasis and ion transport
- Annexin participation in diverse cellular functions highlight their essential role in plant growth and development, and also their importance in crop improvement programs for enhancing multiple stress tolerance
- An attempt has been made to develop hypothetical signal cascades involving annexins in stress tolerance using the published literature

Abstract

Annexins, which form an evolutionarily conserved family of proteins are known to be involved in important biological processes such as membrane trafficking, cytoskeletal organization, cellular homeostasis and ion transport. They are widely known for mediating plant stress responses. Although, the mechanism involved in these responses is not deciphered clearly, several attempts in this direction have strengthened our understanding of the different components involved in annexin-mediated stress responses in plants, which prompted us to link and hypothesize their involvement by predicting a possible relation with different

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