

MOLECULAR STUDIES ON INDUCED PROGRAMMED CELL DEATH IN PLANTS UNDER DROUGHT STRESS.

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ABSTRACT

Drought stress is one of the most limiting factors which decreases yield production of many field crops in many areas of the world in general and Egypt in special.

Cell death of primary roots, leaves, and pollen grains are very common under drought conditions. These are some mechanisms by which yield is affected.

Searching for new principals that may inhibit PCD under drought conditions is one of the uptodate trends in molecular biology and molecular physiology.

The Aim of this work is to inhibit PCD under drought stress and its subsequent effects, and to understand the molecular basis of inhibiting PCD and understanding the mode of action of different compounds then transformation or metabolic engineering can be followed to induce that effect without the need for those compounds.