

## ABSTRACT

Cereals are the most important source of food throughout the world. There are many constraints for the cultivation of cereals; within which drought is a major problem. A review was done on the effects of drought stress in tropical cereals.

The review indicates that most of the physiological processes such as photosynthesis, cell division, cell elongation are affected by drought stress, but different processes affected at or below different water potential levels. Therefore defining a water potential below which yield of a crop will be affected significantly is impossible.

For most cereals critical water demand periods coincides with reproductive stage. Critical water demand period for rice, maize and sorghum has been identified in this review.

Cereals show considerable degree of resistance to drought. They show different mechanisms of drought resistance. Genetic difference within a species for drought resistance has also been identified in cereals.

Although cereal grain yield is affected by drought stress, genetic improvement of cultivars and adoption of cultural practices can improve grain yield in drought affected seasons. Genetic improvement can be done according to the degree of resistance shown by cultivars in experiments. Some of the cultural practices which can be recommended to improve grain yield under drought condition also has been identified in the study.

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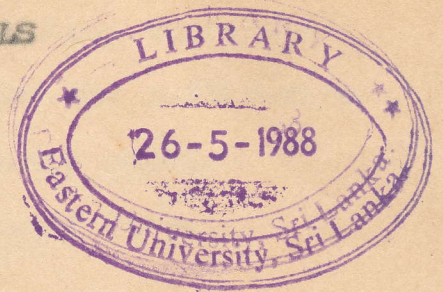
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DROUGHT STRESS IN TROPICAL CEREALS

BY

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