

# Potential of elevated CO<sub>2</sub> (eCO<sub>2</sub>) to alleviate negative effects of suboptimal temperature and water availability in subsequent developmental stages in maize

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## Research questions

Could eCO<sub>2</sub> mitigate the effect of cold stress and cold combined with drought stress on maize seedlings?

Could plants grown under eCO<sub>2</sub> respond to drought more effectively after having been subjected to a combination of cold and drought stress?

## Experiments



Seedling Stage



Further Stages

Cold stress

Cold stress x eCO<sub>2</sub>

Cold stress x drought stress x eCO<sub>2</sub>

Favourable greenhouse conditions

Cold stress x drought stress x eCO<sub>2</sub>

Drought stress x eCO<sub>2</sub>