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RESEARCH ARTICLE

Effect of polyethylene glycol (PEG) 6000 on seed priming in drought tolerant and sensitive barley (*Hordeum vulgare* L.) seeds

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SUMMARY

Barley (*Hordeum vulgare* L.) is a grain cereal in dry land farming systems of semi-arid areas. Effect of polyethylene glycol (PEG)-6000 on seed priming was assessed and germination percentage and seedling vigour index were studied in drought tolerant and drought sensitive barley seedling. Two levels of PEG-6000 *i.e.*-1.5 and -3.0 bars osmotic potential that were imposed to study seed priming by polyethylene glycol (PEG)-6000. Result showed that the germination percentage and seedling vigour index were significantly affected by osmotic potentials. At an osmotic potential value -3.0 bars induced by of PEG-6000, germination percentage and seedling vigour index showed an higher reduction than induced by -1.5 bars osmotic potential.

Key Words : Barley, Polyethylene glycol (PEG), Germination percentage, Seedling vigour index

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