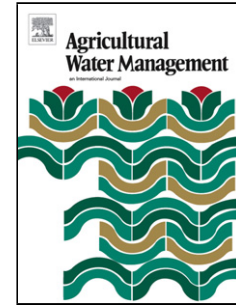


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Effects of application timing of saline irrigation water on broccoli production and quality

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Highlights

- Broccoli showed a bi-phasic response to salinity stress.
- Salinity stress reduced plant growth mainly in the first growth phase.
- Saline water reduced broccoli head mean weight regardless its application timing.
- The use of saline water increased broccoli dry matter and soluble solid content.
- Saline water management influenced broccoli glucosinolate profile.

Abstract: Irrigation with moderately saline water is a necessity in many semi-arid areas of the Mediterranean Basin, and requires adequate irrigation management strategies. Broccoli (*Brassica oleracea* var. *italica*), a crop moderately sensitive to salinity stress, was used to evaluate the effects of the application of saline (S) and non-saline (NS) irrigation water during two growth phases in terms of plant growth, water status, floret yield, glucosinolate profile, and quality. Use of S-water (4 dS m⁻¹

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