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[Adv Exp Med Biol.](#) 2003;527:593-7.

Melatonin in plants.

[Caniato R](#), [Filippini R](#), [Piovan A](#), [Puricelli L](#), [Borsarini A](#), [Cappelletti EM](#).

Source

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Abstract

A widespread occurrence of melatonin in plant kingdom has been reported. The circadian rhythm in the level of melatonin observed in both unicellular algae and higher plants, suggests a role in regulation of photoperiodic and rhythmic phenomena, i.e. a similar function for melatonin in both plants and animals. Evidence has been obtained for a role of melatonin in plant morphogenesis, but more research is needed to ascertain other suggested physiological roles in higher plants (seed dormancy regulation, radical scavenger activity, interaction with calmodulin) as well the ecological significance of the high melatonin levels recorded in alpine plants. Setting-up more reliable analytical methods for melatonin detection and quantification is a basic requirement to get more insight into melatonin roles in plant physiology and ecology.

PMID: 15206778 [PubMed - indexed for MEDLINE]

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[Melatonin in edible plants identified by radioimmunoassay and by high performance liquid chromatography-mass spectrometry.](#) [J Pineal Res. 1995]

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