

MELATONIN IN PLANTS

S u m m a r y

Widespread occurrence of melatonin (MEL) in plant kingdom has been reported. MEL is a conservative compound occurring in evolutionarily distant organisms. Although MEL's function in plants is not well known yet a hypothesis can be put forward that it is a plant growth and development regulator

that promotes vegetative growth in a similar way as indolilo-3-acetic acid (IAA). It acts as a chemical mediator of darkness, coordinating responses to diurnal and photoperiodic environmental cues. It may also be an antioxidant stabilizing the cells and protecting them against harmful environmental influence.