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## THE EFFECT OF LIGHT OF DIFFERENT SPECTRA ON INVERTEBRATES ACTIVE AT DUSK AND IN BROAD DAYLIGHT

### Summary

Not only sunlight intensity and temperature, but also the light wavelength and colour temperature affect various body functions. The importance of the spectrum of light in the life of plants and humans has already been demonstrated. However, similar information on the effect of the light spectra on invertebrates is scarce. We do not know, whether, similarly to mammals, LEDs affect their correct body functions, influence their motor activity or disturb their circadian rhythm.

The aim of the study was to verify the effect of the LED light of various wavelengths on motor activity of invertebrates having different preferences for the light intensity in their natural environment. The obtained results show that the light wavelength and colour temperature influence the motor activity of the studied insects. It was demonstrated that a scheme in which a given light affects insects of different light preferences is not uniform. On the basis of the conducted study it can be concluded that a change in exposure to LED light of specified colour in the human environment may significantly affect functioning of invertebrates.