عنوان مقاله:

Guiding the Honeybee Navigation System Using the Second-Harmonic Line Width of ۴۵۶ nm Nd:GdVO۴ Laser to Prevent CCD Phenomenon

محل انتشار:

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خلاصه مقاله:

Today, one of the biological problems is electromagnetic pollution in the environment. The intensity of electromagnetic radiation is so pervasive that it is now known as a form of latent and silent pollution. The study of the biological effects of these waves on the growth and development of living insects - such as bees - are considered by many scientific communities around the world. However, the response of honey/wild bees to traps designed to selectively stimulate bee light receptors by fluorescent light indicated that selective arousal of the blue light receptor type was highly attractive. In this paper, to selectively stimulate the blue light receiver in bee species in order to guide the bee navigation system to return to its hive and prevent the colony collapse disorder (CCD) phenomenon, high-efficiency continuous laser emission by second-harmonic line width of ۴۵۶ nm Nd:GdVO۴ laser is proposed.

کلمات کلیدی:

Electromagnetic Waves, Colony Collapse Disorder (CCD) Phenomenon, Bee Navigation System, Nd:GdVO۴ Laser, Fluorescent Blue Light.