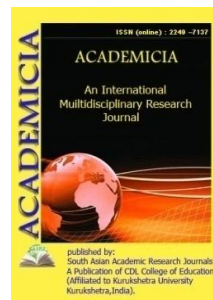




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**CREATING A BIOPHYSICAL TRAPPING DEVICE BASED ON AN  
OPTICAL RADIATION SOURCE WITH A LIGHT-EMITTING DIODE**

**Abdurashid Khamidillaevich Yusupov\***

\*Doctoral Student,  
Andijan Machine-Building Institute,  
UZBEKISTAN

**ABSTRACT**

*The article addresses the problems of using semiconductor LEDs in the creation of environmentally friendly, high-efficiency, energy-efficient biophysical trapping device and their introduction into agriculture. The use of semiconductor LED lamps that are compatible with the spectrum of solar light in the device is preferred over other methods in that it is effective in combating pest flying insects and does not harm beneficial insects. The proposed device is environmentally friendly compared to chemical and biological methods of pest control. The device consists of an energy-saving circuit, which does not require high energy in use. This prevents inconveniences when used in field conditions, and the efficiency of useful work in the fight against flying insects is higher than other methods.*

**KEYWORDS:** *Semiconductor LED, High Voltage, Circuit, Semiconductor Transistor, Transformer, Conductors, Energy Consumption, Light Spectrum, Power Supply, Solar Photo Element, Battery, Biophysical Trap, Flying Insects, Sexual Pheromone.*

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