

STUDY THE POSSIBILITY KILLING OF *Escherichia coli* AFTER IRRADIATION BY DIODE WITH TWO POWER (3,7)W LASER.

Nada Suheel Ahmad* MAZEN KAREAM** EBTEHAL HAMED NSAYF***

* Dept. of Physical Sciences-College of Sciences -University of Diyala.
Tboo_2010@yahoo.com.

** Dept. of Laser Science- College of Sciences -University of Diyala.
Mazen kaream@yahoo.com.

*** Dept. of Biology- College of Sciences -University of Diyala.
Ebtehal_3050@yahoo.com

ABSTRACT

In this study was used diode lasers to kill *Escherichia coli*. Two types of diode laser have been used. The first one 3-watt 810 nm wavelength and the second 7 watt wavelength 1064 nm. Irradiation of samples was taken place from the physiological saline containing the *Escherichia coli* in three sizes 0.3, 0.2, 0.1 cm³ in test tubes of size 0.5 cm³. Samples were irradiated at different periods of time for each laser. The results showed that after each irradiation a highest kill of 100% of the bacteria occurred by used laser diode

(3 W) through a period of 20 minutes.
In the diode laser (7 W) a recording of the highest kill rate of 100% has been obtained in 1.5 min period.

Key words: laser diode ,kill bacteria .