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Title of Thesis

Bioremoval of some pesticides using local bacterial isolates.

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Abstract

In the present study, three bacterial isolates (*ochrobactrum oryzae*, *Pseudomonas aeruginosa* and *Enterobacter ludwigii*) were used to remove Atrazine (atrazine herbicide), diazinon (an organophosphorous insecticide), from contaminated wastewater. The growth of bacterial isolates were increased as each pesticide concentration was increased. Growth of *O. oryzae* on atrazine was as high as possible at pH tended to alkaline side (pH = ٩) where the optical density was ٠,٦٨ and protein content ٢٠٢,٣ mg / l after ten days of incubation. Growth of *P.aeruginosa* on diazinon was as high as possible in neutral medium (pH = ٧) where the optical density was ١,١٤٧ and the protein content was ٣٢٨,٥ mg / l after ١٤ days of incubation. Growth of *E. ludwigii* on oxamyl was the highest in neutral medium (pH = ٧) where it was of optical density ٠,٣٧٦ and protein content ٦٠ mg / l, Growth of the *O.oryzae* on atrazine was as high as possible at temperature ٣٠°C where optical density was ٠,٧٠٧ and protein content ٢٢٠ mg / l after ١٠ days of incubation, growth of *P.aeruginosa* on diazinon was as high as possible at a temperature of ٣٠° C where optical density was ١,٠٥ and protein content was ٣٤٨ mg / l after ١٤ days of incubation , and the growth of *E. ludwigii* on oxamyl was as high as possible at a temperature of ٣٧° C where optical density was ٠,٣٩٦ and protein content was ٥٥,٨ mg /l after ٦ days of incubation.