



LIFE SCIENCE FOR A SUSTAINABLE FUTURE
(Seminar Proceedings of the International Conference on Current
Trends in life Science for a Sustainable Futuro)

First Published
August 2022

General Editor
Meera George, Ph. D

Published by
Romanson Printing & Publishing House Pvt. Ltd.
S.S. Kovil Road, PTC Tower, Thiruvananthapuram-01
Tel: +91 471 4250 555
Mob: +91 91 88 2 99 001



Mar Ivanios College
Mar Ivanios Vidya Nagar, Bethany Hills, Nalanchira P.O.
Thiruvananthapuram - 695015, Kerala, India.

Print & Cover
Romanson Print House
S.S. Kovil Road, PTC Tower, Thiruvananthapuram-01
Mob: +91 91 88 2 99 002

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ISBN : 978-93-93876-20-1

Comparative Study on The Effect of two Agrochemicals on the Fecundity of a Soil Isopod - *Cylisticus convexus*

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Abstract :

The soil dwelling organisms do a responsible function in the ecosystem by organic matter breakdown, nutrient cycling and soil structure stability. Agrochemicals have long been used in agriculture to control pests and diseases in crops and thereby increasing agricultural production. However most of them are toxic to non target species and may cause negative impacts on beneficial soil macro invertebrates. The two agrochemicals which are toxic in nature are tested for their toxicity to *Cylisticus convexus* at different concentrations. The normal fecundity of *Cylisticus convexus* and the effect of a pesticide fenvalerate and the fungicide fytran on the fecundity was studied. The values LC-50 and LC-100 values obtained in the present study underlined the toxicity of these chemicals to soil organisms like *Cylisticus*. The studies revealed that both the agrochemicals has a profound effect in reducing the fecundity of *Cylisticus convexus*, but the effect of fenvalerate is high when compared to fytran.

Key words : Isopod, *Cylisticus convexus* ,Fecundity,toxicity, LC 50

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