Comments on the manuscript “Fungal degradation of chlorpyrifos by *Acremonium* sp.strain (GFRC-1) isolated from a laboratory-enriched red agricultural soil”

Ranjan Kumar Bhagobaty

Received: 20 October 2010 / Revised: 2 November 2010 / Accepted: 20 December 2010 / Published online: 5 January 2011
© Springer-Verlag 2011

The research article entitled “Fungal degradation of chlorpyrifos by *Acremonium* sp. strain (GFRC-1) isolated from a laboratory-enriched red agricultural soil”, published by Kulshrestha and Kumari (Biology and Fertility of Soils DOI 10.1007/s00374-010-0505-5) states “Utilization of chlorpyrifos as a sole carbon source by a mixed bacterial culture (Bhagobaty and Malik 2008; Rani et al. 2008) and as a limited nitrogen source by *Phanerochaete chrysosporium* (Bumpus et al. 1993; Wang et al. 2005) has been already reported.” However, we have clearly mentioned in the abstract and the main text of our article that four bacterial isolates (Pure cultures) RA-3, RA-5, RA-10, and RA-20 showed utilization of Chlorpyrifos as the sole source of carbon. These pure bacterial cultures were biochemically found to belong to the genus *Pseudomonas*. In addition, Rani et al. (2008) reported that a single soil bacterial isolate designated as MS09 (*Providencia stuartii*), was capable of utilizing Chlorpyrifos as a single carbon source.

In addition, Kulshrestha and Kumari (2010) state that “Chlorpyrifos-degrading microbial species have been already isolated from soil (Lakshmi et al. 2009)”. It seems

that Lakshmi et al. 2009 were the first to isolate Chlorpyrifos-degrading bacteria from soils, and this is not true.

References

- Bhagobaty RK, Malik A (2008) Utilization of Chlorpyrifos as a sole source of carbon by bacteria isolated from wastewater irrigated agricultural soils in an industrial area of Western Uttar Pradesh, India. Res J Microbiol 3:293–307
- Bumpus JA, Kakar SN, Coleman RD (1993) Fungal degradation of organophosphorus insecticides. Appl Biochem Biotechnol 40:715–726
- Kulshrestha G, Kumari A (2010) Fungal degradation of chlorpyrifos by *Acremonium* sp. strain (GFRC-1) isolated from a laboratory-enriched red agricultural soil. Biol Fertil Soils. doi:10.1007/s00374-010-0505-5
- Lakshmi CV, Kumar M, Khanna S (2009) Biodegradation of chlorpyrifos in soil by enriched cultures. Curr Microbiol 58:35–38
- Rani MS, Lakshmi VK, Suvarnalatha DP, Madhuri RJ, Aruna S, Jyothi K, Arasimha G, Venkateswarlu K (2008) Isolation and characterization of a chlorpyrifos degrading bacterium from agricultural soil and its growth response. Afr J Microbiol Res 2:026–031
- Wang L, Zhang L, Chen H, Tian Q, Zhu G (2005) Isolation of a triazophos-degrading strain *Klebsiella* sp. E6 effectively utilizing triazophos as a sole nitrogen source. FEMS Microbiol Lett 253:259–265

R. K. Bhagobaty (✉)
Microbiology Laboratory, Department of Biotechnology
and Bioinformatics, North-Eastern Hill University,
Shillong-793022, Meghalaya, India
e-mail: rbhagobaty@gmail.com