KERALA AGRICULTURAL UNIVERSITY
DIRECTORATE OF RESEARCH
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Director of Research

Dated: 01/09/2022.

No. R4/65511/2019

Sub:- KAU – DoR – Toxicological Data Generation and Registration of biopesticides - Reg.

Expression of Interest (EOI)

Expression of interests are invited from laboratories accredited for generation of data on registration of pesticides with CIBRC (Central Insecticides Board and Registration Committee) for the generation of toxicological data on one strain of antagonistic fungi (*Thrichoderma viride*), one strain of antagonistic bacteria (*Pseudomonas flourescens*), two strains of entomopathogenic fungi (*Beauveria bassiana*) and one strain of another entomopathogeic fungi (*Lecanicillium saksenae*). The antagonistic fungi (*T. viride*) and the antagonistic bacteria (*P. flourescens*) already have 9(3b) registration and environmental safety testing only needs to be conducted. Whereas, for the three strains of entomopathogenic fungi complete toxicological data needs to be generated for 9(3) registration as per the data requirements for CIBRC registration.

The firms should generate and provide the following toxicological data listed below for the registration of biopesticides as per CIBRC guidelines and also should assist Kerala Agricultural University in filing the application with CIBRC and in obtaining the registration for the strains. As per the minutes of the 371st meeting of registration committee held on 16.12.2016, it was decided as 'Toxicology data shall be accepted from Non-GLP laboratory also for encouraging of new strain registration/any new or repeat studies for old strain. This decision shall be applicable to all categories of biopesticides registration, henceforth'. Hence, the toxicology data can be generated in non-GLP laboratory also. Interested firms/agencies may kindly quote the rates for the above services on or before 5 pm on 15th September, 2022. The EOI may please be mailed to dr@kau.in.

A. **Toxicology data generation for antagonistic fungi (*Trichoderma viride*)**
   As the strain already has 9(3b) registration, only the environmental safety testing needs to be done for the formulation
   1. Non-target vertebrates
      1.1 Mammals
      1.2 Birds (two species)
      1.3 Fresh water fish
   2. Non-target invertebrates
      2.1 Soil invertebrates (Earthworm, *Lumbricus terrestris*)

B. **Toxicology data generation for antagonistic bacteria (*Pseudomonas flourescens*)**
As the strain already has 9(3b) registration, only the environmental safety testing
needs to be done for the formulation

1. Non-target vertebrates

    1.1 Mammals
    1.2 Birds (two species)
    1.3 Fresh water fish
2. Non-target invertebrates
    2.1 Terrestrial invertebrates (honey bee and silkworm)
    2.2 Soil invertebrates (Earthworm, *Lumbricus terrestris*)

C. Toxicology data generation for entomopathogenic fungi (all the three strains are new
and requires full toxicological data for 9(3) registration.

1. For mother culture
    1.1 Single dose oral (rat and mouse)
    1.2 Single dose pulmonary
    1.3 Single dose dermal
    1.4 Single dose intra-peritoneal
    1.5 Human safety records
2. For formulation
    2.1 Single dose oral (rat and mouse)
    2.2 Single dose pulmonary
    2.3 Primary skin irritation
    2.4 Primary eye irritation
    2.5 Human safety records
3. Environmental safety testing: Core information requirements (for formulation only)
    3.1 Non-target vertebrates
        3.1.1 Mammals
        3.1.2 Birds (two species)
        3.1.3 Fresh water fish
    3.2 Non-target invertebrates
        3.2.1 Terrestrial invertebrates (Honey bee and silk worm)
        3.2.2 Soil invertebrates (earthworm, *Lumbricus terrestris*)

For clarifications, please contact Dr. Berin Pathrose, Associate Professor (Plant Protection).
Email: berin.pathrose@kau.in, Mob. No. 9446967688

Yours faithfully,

MADHU SUBRAMANIAN