# **Profile of Scientist**

1. <u>Name of the Scientist:</u>

#### Dr. M. R. Singh

- 2. Personal biodata:
  - a) **Designation:**
  - b) Joining date in ICAR:
  - c) Discipline and specialization:

Senior Scientist (Ento.) December 17, 1997 Entomology, Integrated Pest Management, Toxicology

### d) Training / advance exposure in the area of work:

- Summer School on "Advances in sugarcane technology" (May 10 to 30, 2000) at IISR, Lucknow (UP).
- Winter School on "Emerging trends in Biological Control" (March 10 to 31, 2005) at PDBC, Bangalore (Karnataka).
- e) Contribution to the scientific advancement:
  - Rearing Technology for sugarcane black bug, Dimorphopterus gibbus
  - Rearing Technology for *Eumicrosoma* sp. an egg parasitoid of black bugs of sugarcane
  - Development of diet for rearing of Coccinellid predators
  - Standardization of doses of plant based insecticides against sucking pests of sugarcane and their effects on natural enemies in sugarcane eco system
  - Bioassay of genetically transformed sugarcane variety (with *Cry1Ab* gene) against sugarcane borer larvae

# 3. <u>Future Planning of research:</u>

- Development of cost effective rearing techniques for mass multiplication of insect pests of sugarcane and their bio-agents
- Biodiversity of insect pests of sugarcane and their bio agents
- Use of insect behavioural activities in management of insect pests
- Development of integrated biological control of sugarcane pests

# 4. <u>Publications:</u>

- M. R. Singh and Varma Ashok. 2004. A technique for mass rearing of black bug, Dimorphopterus gibbus (Fabricius) (Hemiptera:Lygaeidae) Indian Journal of Entomology 66 (2): 183-184.
- M. R. Singh and Ashok Varma 2004. Bio-efficacy of non conventional insecticides against sucking pests of sugarcane. *Indian Journal of Sugarcane. Technology*, 19 (1&2): 75-77.
- 3. M. R. Singh 2006. Field evaluation of sequential releases of *Trichogramma chilonis* Ishii and *Cotesia flavipes* Cameron against borer pests of sugarcane. *Indian Journal of Entomology*, **68** (4) : 408-409.
- M. R. Singh. 2006. Biology of *Eumicrosoma* sp. (Hymenoptera:Sceilionidae) reared on the eggs of black bug, *Dimorphopterus gibbus* (Fabricius) (Hemiptera:Lygaeidae) of sugarcane. *Journal of Biological Contro,l* 20 (1): 77-79.
- M. R. Singh. 2007. Effect of bio-pesticides on *Trichogramma chilonis* Ishii and *Cotesia flavipes* Cameron parasitoids of borer pests of sugarcane. *Indian Journal of Entomology*, 68 (3): 218-220.

#### 5. Other relevant activities of Scientist:

- Member of different institute building committees
- Source person for farmers and sugar mill staff training programmes (on campus and off campus) organized by Institute and KVK, Lucknow
- Referee for National and International Journals
- External examiner for M.Sc. Theses