



2019 ANBP Award of Excellence

Dr. Clive Stinson

Beneficial Insectary, Inc.

Every year, ANBP recognizes an individual who has made, or is making, extraordinary contributions to the field of augmentation biological control and/or its use in integrated pest management. This year we could not have selected a more appropriate recipient for the award. Dr. Stinson has worked on an extraordinarily wide range of areas critical to the discovery and implementation of natural enemies (for both arthropod and weed biocontrol), all of which are important in IPM systems today.



Dr. Clive Stinson holds a B.S. degree in Ecology from the New University of Ulster in the UK., and a M.S. and Ph.D degree in Applied Entomology from the University of London in the UK. An internationally recognized leader in his field, Clive has been conducting advanced entomological research and development for over 35 years, working in an array of commercial and industrial settings. From 1983 to 1988, Clive was Project Manager for CAB International in Delmont, Switzerland. He led the program for the biological control of spotted and diffuse knapweed. This entailed field surveys and collecting phytophagous insects attacking knapweed in their native habitats of Central and Eastern Europe (Yugoslavia, Bulgaria, Romania, Hungary, and Austria). As part of this classical biocontrol program, he reared, in quarantine, collections of potential natural enemy species at CABI's biological control facility in Switzerland.

An essential step in classical biocontrol is host testing, so Clive also developed screening techniques to test host specificity against an exhaustive list of plant pests determined by the USDA and Ag Canada. He developed off-plant rearing techniques for late instar larvae prior to pupation which involved powdered Knapweed roots mixed with a range of nutrients and insect vitamins. As a result of Clive's work, one species, a curculinoid beetle (*Cyphocleonus achates*) was approved for release in Canada and the US by the USDA and Ag Canada.

From 1988 to 2010, Clive was head of production at Syngenta Bioline in the UK. In this position, Clive performed an enormous amount of work to the benefit of crop protection in the UK, Europe and North America. Among his many other duties, he was responsible for research regarding the nutrition of host insects and mites used in the commercial production of beneficial insects and mites and the development of new products used in augmentative biological control. He also spearheaded numerous other R & D projects during this time. A bulleted summary of some key contributions include:

1. The development of a yeast-based diet for several species of astigmatid mites.

2. Field testing of predator mites in breeding sachets in commercial cucumbers in the UK and Holland.
3. Development of a dextrose-yeast diet for the production of stored fruit mite *Carpoglyphus lactis*.
4. Development of a new prey mite *Thyreophagus entomophagus* for the commercial production of a number of species of phytoseiid predator mites. For this it should be noted that Clive was recognized as an inventor by the European Patent Office, Munich (Title: Method for rearing predatory mites”) and by the “World Intellectual Property Organization (Title: “Method for rearing predatory mites)
5. The development of a soft plant feed recipe to optimize the palatability and nutrient availability of plants used to breed insect and mite pests in commercial production of beneficial insects and mites on plants.

From 2010 Clive has been head of production at Beneficial Insectary in Redding. Undoubtedly, his background has been a tremendous asset to the company. We heartily extend our congratulations to Clive for this award and will be adding him to the list of our past awardee’s below.



Everett “Deke” Dietrick
Rincon-Vitova Insectaries
Ventura, California
USA



Fred Legner
Professor Emeritus
Dept. of Entomology
University of California
Riverside, California
USA



Sinthya Penn
Beneficial Insectary, INC.
Redding, California
USA



Don Elliott
Applied Bio-nomics
Sidney, British Columbia
CANADA



Norman Leppla
Dept. of Entomology
& Nematology
University of Florida
Gainesville, Florida
USA



Pierre Ramakers
Wageningen University &
Research Centre
THE NETHERLANDS



Dave Gillespie
Agriculture &
Agri-Food Canada
Agassiz, B.C.
CANADA



Jim McMurtry
Professor Emeritus
Dept. of Entomology
University of California
Riverside, California
USA



Glenn Scriven
Formerly Biotactics, INC.
Romoland, California
USA



Karel Bolckmans
New Business Dev.
Director
Special Fruit
Belgium



Joop C. van Lenteren
Professor Emeritus
Wageningen University
THE NETHERLANDS



Graeme Murphy
Ontario Ministry of
Agriculture and Food
(OMAFRA)
CANADA



Dan Cahn
President
Syngenta Bioline
USA

