#### **CLIVE ARTHUR EDWARDS**

#### **ACADEMIC QUALIFICATIONS:**

Bristol University, UK	1951	B.Sc. (Honours)
Bristol University, UK	1955	M.Sc. (Zoology)
Wisconsin University, USA	1956	M.S. (Toxicology)
Wisconsin University, USA		Ph.D. (Entomology)
Institute of Biology, UK	1972	Fellow of the Institute of
		Biology (F.I. Biol.: C.I. Biol)
Bristol University, UK	1986	D.Sc. (Science)



#### **APPOINTMENTS HELD:**

1956-57	Graduate Student, University of Wisconsin (Kellogg Foundation and NSF
	Fellowships)
1951-55,1957-60	Government Entomologist, Ministry of Agriculture, Fisheries, and Food, U.K.
1960-66	Principal Scientific Officer, Rothamsted Experimental Station, Harpenden, Herts,
	UK
1966-68	Visiting Professor, Purdue University, Indiana (Senior NSF Fellowship)
1968-82	Principal Scientific Officer, Rothamsted Experimental Station, U.K.
1982-85	Senior Principal Scientific Officer, Rothamsted Experimental Station, U.K.
1985-90	Chair and Professor, Entomology Department, The Ohio State University
1990-present	Professor, Entomology Department, The Ohio State University

## **FELLOWSHIPS**

Fellow of Institute of Biology (F.I. Biol)

Fellow of U.K. Royal Society of Arts (F.R.S.A)

Fellow of U.K. Royal Entomological Society of London (F.R.E.S)

## HONORS & AWARDS:

Recipient of Medal from International Symposium of Pesticide Chemistry, 1974. Recipient of prestigious ERAS Pollution Abatement Award from Royal Society of Arts and Confederation of British Industry, March, 1984. Recipient of Medal for Annual Visiting Lecture from University of Helsinki, Finland, 1985. National Creative Programming Award by the Conference and Institutes Division of the National University for Continuing Education Association, 1989. Farming Systems Award, Michigan State University, 1990. Outstanding International Faculty Member, The Ohio State University, 1995. Presidential Citation, U.S. Soil and Water Association, 1996. Presidential Citation, Indian Soil Ecology Society, 1997. Distinguished Scholar Award, The Ohio State University, 1998. Distinguished Lecturer Award, the Ohio State University, 2000. Professional Career Achievement Award, U.S. Soil Ecology Society, 2001. Senior Distinguished Faculty Research Award, O.A.R.D.C, The Ohio State University, 2002 British Crop Protection Council Gold Medal - "For Services to U.K. Crop Protection", 2002 Entomology Department Research Medal, O.A.R.D.C. The Ohio State University 2002

## **PROGRAM CAPSULES:**

**<u>Research</u>**: Soil ecology and environmental research. Functioning of agroecosystems. Effects of agricultural practices (pesticides, fertilizers, cultivations, rotations) on soil systems. Breakdown of organic matter in soil. IPM of soil pests. Soil ecotoxicology. Earthworm biology and ecology. Vermiculture and vermicomposting. Human population constraints and forecasting future environmental issues.

**<u>Teaching:</u>** Courses on 'Insect Ecology' and 'Pesticides, the Environment and Society' 'Soil Ecology'. Major Advisor to 18 Ph.D students and 7 M.S Students who have graduated since 1985

# **FIVE SELECTED PUBLICATIONS**

- Author of more than 408 scientific publications (89 in last five years) including authoring or editing 31 books. Editor in Chief "Applied Soil Ecology" and "Advances in Agroecology"
- Edwards, C.A., Bohlen, P.J. 1972, 1977, 1996. Biology and Ecology of Earthworms (1<sup>st</sup> Ed. 1972; 2<sup>nd</sup> Ed. 1977; 3<sup>rd</sup> Ed. 1996). Chapman and Hall, London 426pp
- Edwards, C.A. (Ed.) 1998, 2004 Earthworm Ecology (1<sup>st</sup> Ed. 1998; 2<sup>nd</sup> Ed. 2004) CRC Press, Boca Raton Fl. London, New York, 424 pp.
- Edwards, C.A., Arancon, N.Q. 2004. Interactions among Organic Matter Earthworms and microorganisms in Promoting Plant Growth in Functions and Management of Organic Matter in Agroecosystems. C.A. Edwards (Editor in Chief), F. Magdoff, R. Weil (Eds.) CRC Press, Boca Raton. 327-376.
- Edwards, C.A., Arancon, N.Q. 2004 The Use of Earthworms in Breakdown of Organic Matter to Produce
- Vermicomposts and Animal Feed Protein In. Earthworm Ecology (2<sup>nd</sup> Edition) Ed. C.A. Edwards, CRC Press, Boca Raton, London, New York. 345-438.

## FIVE SELECTED RECENT GRANTS (TOTAL \$1,686,872)

Total grants awarded since 1985 \$5,162,100

- USDA/NRI/CSREES Effects and Modes of Action of Vermicomposts on Growth of Field Crops. C.A. Edwards, J. Metzger, P. Bierman. \$286,600. 2001-2005
- USDA/SBIR/CSREES Suppression of Plant Pests, Diseases and Human Pathogens (Sub-Contract). C.A. Edwards \$145,272. 2003-2004
- NSF (Ecosystems) The Production of Plant Growth Regulators through Interactions Between Earthworms and Organic Materials. C.A Edwards, S. Subler, J. Metzger. \$300,000. 1998-2001
- USDA/NRI/CSREES The Importance of Earthworms in Transport of Dissolved Organic Nitrogens in Agroecosystems. C.A. Edwards, S. Subler, M. Shipitalo \$315,000. 1995-1998
- NSF (Ecosystems) The Role of Earthworms in Conservation and Loss of Carbon and Nitrogen in Ecosystems. C.A. Edwards, R.W. Parmelee, B.R. Stinner \$640,000. 1995-1999

## THREE IMPORTANT SCHOLARLY ACCOMPLISHMENTS IN LAST FIVE YEARS

- The development and testing of an integrated soil microcosm system for assessing the environmental impacts of pollutants
- Demonstration of the broad and significant impacts of low application rates of vermicomposts on crop productivity on greenhouse and field, independent of nutrient availability. Identification of plant growth regulators in vermicomposts
- Demonstration of very significant suppression of plant pathogens, plant parasitic nematodes and arthropods pests of crops by low application rates of vermicomposts

## **IMPORTANT COLLABORATIONS**

- Organization of a Sustainable Agriculture Program at OSU and collaboration across the North Central Region with other State Sustainable Agriculture Programs.
- Development of an Interdisciplinary Program in Soil Ecology at OSU and award of an Ohio State Grant for an Eminent Scholar Position in Soil Ecology in collaboration with School of Natural Resources
- Microcosm research collaboration with scientists in U.S.A (3), Germany (3), Russia (3), Portugal (2), Netherlands (3), U.K. (2), Italy (2) in development of a microcosm technology for assessing environmental pollution.
- Vermiculture and Vermicomposting: Collaboration with J. Metzger (Hort. & Pl. Sci), H. Keener (Fd. Env. & Ag Eng), R. Riedel (Pl. Path), D. Stinner (Ent) at OSU. Oregon Soil Corporation, China Agriculture University, Institute of Zoology, Beijing, China and Bangalore University, India