

**Name: Anne Margaret Akol (BSc (Hons), PGDE MPhil, PhD)**

Associate Professor

College of Natural Sciences, Makerere University, P.O. Box 7062, Kampala, Uganda

Email: [aakol@cns.mak.ac.ug](mailto:aakol@cns.mak.ac.ug)

Tel.: +256 772 367 727

Anne M. Akol is an entomologist and Associate Professor, with teaching, research and consultancy experience in the management of pests and disease vectors and in the utilization of beneficial insects, particularly bees for the well-being of human beings and the environment. She also has a wealth of administrative experience having held various positions of responsibility within Makerere University, the latest being Chair/Head of Department from 2008 – 2016. She has a BSc degree in Biology, a postgraduate diploma in Education both from Makerere University, an MPhil degree in Applied Biology (Entomology) from the University of Cambridge (United Kingdom) and a PhD degree (Agricultural Entomology) awarded jointly by Kenyatta University (Kenya) and the International Centre for Insect Physiology and Ecology (icipe) based in Kenya. She is a fellow of the Cambridge Commonwealth Society and has been a visiting lecturer at the National University of Rwanda at Butare, and a visiting fellow at the Norman E. Borlaug Institute for International Agriculture, and at Texas A&M University, USA under the Faculty Exchange Programme for Africa.

Anne has expertise and experience in the evaluation and implementation of pest management techniques for pests in agriculture and insects of public health concern, biodiversity assessments (invertebrates), apiculture (beekeeping). Her research interests encompass insect behavior, integrated pest management, apiculture, ecology and management of ecosystems for the conservation of biodiversity and ecosystem services. She is presently leading a research programme at Makerere University on honeybee health and pollination biology.

She has successfully supervised 16 graduate students to-date, including four PhD students

Thesis titles supervised:

- Flea diversity, distribution and infection with *Yersinia pestis* in Vurra and Okoro, plague endemic counties of West Nile
- Biogeographical examination of butterfly fauna in selected West Albertine Rift forests
- Effectiveness of integrated control of *Onchocerca volvulus* transmission by *Simulium naevei* in Kashoya-Kitomi focus
- Evaluation of selected botanicals for the management of ticks and tick-borne diseases
- Termite assemblages and their feeding activity in selected landuse types of the rangeland ecosystem of Nakasongola district, Uganda
- The effect of non-intensive fish farming systems on water quality and community livelihoods in Mbale sub-region, Eastern Uganda
- Population dynamics of Tephritid fruit flies infesting mango orchards in Luwero and Wakiso districts
- Growth response of different banana planting materials to banana weevil infestation
- Susceptibility of selected cultivars of East African Highland and new Hybrid Bananas to Nematode infestation in Uganda

- Impact of agriculture on biodiversity, using butterflies as bio-indicators
- Bee diversity and their forage-plant resources in Queen Elizabeth National Park
- Effect of pesticide applications on species richness, population density and foraging activities of bees in cotton agro systems in Padyere county, Nebbi district, Uganda
- Prevalence of varroa: influence of altitude and management practices on the degree of infestation in Uganda
- Diversity and distribution of *Liriomyza* leafminers and their associated parasitoids in selected vegetable production systems in Western Uganda
- Biting behaviour and Vectorial Capacity of *Plasmodium* vectors under prolonged use of insecticide-treated bed-nets in Kamuli district, Uganda
- Morphological and molecular spatio-temporal analysis of mosquito diversity, in and around Ziika forest, Uganda
- Spatial and matrix influences on the biogeography of three insect taxa in selected forest fragments in central Uganda
- Diversity, Host Utilization and Ecological Niche of Tephritid (Diptera: Tephritidae) Fruit flies in Uganda
- Prevalence and damage of sorghum midge *Contarinia sorghicola* Coquillett in different agro-ecologies of Uganda

#### Publications List

- Moses Chemurot, Marleen Brunain, Anne M. Akol, Tine Descamps and Dirk C. de Graaf (2016). First detection of *Paenibacillus larvae* the causative agent of American Foulbrood in a Ugandan honeybee colony. *SpringerPlus* 5(1): 1090
- M. Chemurot, A.M. Akol, C. Masembe, L. de Smet, T. Descamps, & D.C. de Graaf. 2016. Factors influencing the prevalence and infestation levels of *Varroa destructor* in honeybee colonies in two highland agro-ecological zones of Uganda. *Exp Appl. Acarol*, DOI 10.1007/s10493-016-0013-x
- B.E. Isabirye, A. M. Akol, H. Muyinza, C. Masembe and I. Rwomushana, C. K. Nankinga (2016). Fruit Fly (Diptera: Tephritidae) Host Status and Relative Infestation of Selected Mango Cultivars in three Agro Ecological Zones in Uganda. *International Journal of Fruit Science* 16(1): 23-41
- A.M. Akol, C. Masembe, B.E. Isabirye, C.N. Kukiriza and I. Rwomushana. (2014). Oviposition Preference and Offspring Performance in *Bactrocera invadens* (Diptera: Tephritidae). *International Research Journal of Horticulture* 2(3): 36-44
- Alex Mayamba, Caroline Kukiriza Nankinga, Brian Isabirye and Anne Margaret Akol (2014). Seasonal population fluctuations of *Bactrocera invadens* (Diptera: Tephritidae) in relation to mango phenology in the Lake Victoria Crescent, Uganda. *Fruits* 69(6): 473 – 480.
- M.A. Kaddumukasa, J-P. Mutebi, J.J. Lutwama, C. Masembe and A.M. Akol (2014). Mosquitoes of Zika Forest, Uganda: Species Composition and Relative Abundance. *Journal of Medical Entomology* 51(1): 104 – 113.

- Patrice Kasangaki, Anne M. Akol and Gilbert Isabirye-Basuta. 2013. Butterfly Species List for Selected West Albertine Rift Forests. *Dataset Papers in Biology* 2013: 451461, 4 pages
- Robert Opiro, Cyprian Osinde, Joseph Okello-Onen and Anne M. Akol (2013). Tick-repellent properties of four plant species against *Rhipicephalus appendiculatus* Neumann (Acarina: Ixodidae) tick species. *Journal of Agricultural Research and Development* 3(2): 17 – 21.
- Patrice Kasangaki, Anne M. Akol and Gilbert Isabirye-Basuta. 2012. Butterfly Species Richness in Selected West Albertine Rift Forests. *International Journal of Zoology* 2012: 578706. Doi 10.1155/2012/578706
- B.E. Isabirye, M. Isabirye and Anne M. Akol (2010). Picturing adoption of below-ground biodiversity technologies among smallholder farmers around Mabira Forest, Uganda. *Tropicultura* 28(1): 24 – 30.
- Robert Opiro, Anne M. Akol and Joseph Okello-Onen (2010). Ethnoveterinary botanicals used for tick control in the Acholi sub-region of Uganda. *Journal of Animal and Veterinary Advances* 9(23): 2951 – 2954.
- Gerald Amatre, Nackson Babi, Russell E. Ensire, Asaph Ogen-Odoi, Linda A. Atiku, Anne Akol, Kenneth L. Gage and Rebecca J. Eisen (2009). Flea diversity and infestation prevalence on rodents in a plague-endemic region of Uganda. *American Journal of Tropical Medicine and Hygiene* 81(4): 718 – 724.
- Wilson Waiswa Mwanja, Anne Akol, Laila Abubakar, Matthew Mwanja, Scot Batman Msuku and Fred Bugenyi (2006). Status and impact of rural aquaculture practice on Lake Victoria basin wetlands. *African Journal of Ecology* 45: 165 – 174.
- Adrian Martin, Anne Akol and Jon Phillips (2013). Just Conservation? On the fairness of sharing benefits. In: *The Justices and Injustices of Ecosystem Services* (Ed. T. Sikor). Earthscan/Routledge, London. Pp 69 – 91.
- Akol A.M., Chidege M.Y., Talwana H.A.L. & Mauremootoo J.R. (2011). Invertebrate pests of maize in East Africa (Kenya, Uganda and Tanzania). Lucid v.3.5 Key and Factsheets. CABI and The University of Queensland. Available online at <http://keys.lucidcentral.org/keys/v3/EAFRINET>
- A.M. Akol; P.G.N. Njagi; S. Sithanatham; J.M. Mueke (2003). Effects of two neem insecticides on the attractiveness, acceptability and suitability of diamondback moth larvae to the parasitoid, *Diadegma mollipla* (Holmgren) (Hymenoptera: Ichneumonidae). *Journal of Applied Entomology* 127: 325-331
- A.M. Akol (2002). *Utility of neem insecticide formulations for pest management in Brassica production*. In: (J.S. Tenywa, M.P. Nampala, S. Kyamanywa, M.Osiru, Eds.) Proceedings of the Integrated Pest Management Conference, 8-12 September 2002, Kampala, Uganda, African Crop Science Society, pp. 116-120.
- A.M. Akol; S. Sithanatham; P.G.N. Njagi; A. Varela; J.M. Mueke (2002). Relative safety of sprays of two neem insecticides to *Diadegma mollipla* (Holmgren) a parasitoid of the diamondback moth: effects on adult longevity and foraging behaviour. *Crop Protection* 21: 853-859.