

Louise E.M. Vet is director of the Netherlands Institute of Ecology (NIOO), the largest institute of the Royal Netherlands Academy of Arts and Sciences (KNAW), and professor of Evolutionary Ecology at Wageningen University.



She is a biologist with a broad interest in ecology and evolution of multitrophic interactions. Her research involves chemical, behavioural and molecular ecology of plants and insects in a community context, delivering basic knowledge for the strategic development of sustainable agro-ecosystems that are primarily based on the prevention of pests and diseases (life-support function of biodiversity). She is an elected member of the Royal Netherlands Academy of Arts and Sciences. Vet was awarded several international prizes for her research (e.g. British Rank Prize for Nutrition) and serves on a diversity of national and international boards and committees

Research interests

Positions:

Researcher

Director of the NIOO

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Research Interests:

Louise Vet is a professor of Evolutionary Ecology at Wageningen University and director of the Netherlands Institute of Ecology (NIOO-KNAW), a research institute of the Royal Netherlands Academy of Arts and Sciences. She is an ecologist with a broad interest in ecology and evolution, working on multitrophic interactions, parasitoid behaviour and especially parasitoid learning. Her research involves chemical, behavioural and molecular ecology of plants and insects in a multitrophic and community context. The research ranges from fundamental to strategic: from questions on the evolution of species traits and species interactions within communities to the strategic development of sustainable agro-ecosystems that are primarily based on the prevention of pests and diseases (life-support function of biodiversity). She is an elected member of the Royal Netherlands Academy of Arts and Sciences. Vet was awarded several international prizes (e.g. British Rank Prize for Nutrition).

Keywords:

Evolutionary ecology of multitrophic systems;

Search strategy and life history of insect parasitoids;

Role of infochemicals; Information processing;

Ecogenomics

Research output

- 1. Chromosomal scale assembly of parasitic wasp genome reveals symbiotic virus colonization**
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- 2. Multi-camera field monitoring reveals costs of learning for parasitoid foraging behaviour**
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- 3. Next Generation Biological Control: The Need for Integrating Genetics and Evolution**
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5. **Chapter Four - Integrating biodiversity conservation in wider landscape management: Necessity, implementation and evaluation**
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6. **Do plant volatiles confuse rather than guide foraging behavior of the aphid hyperparasitoid *Dendrocerus aphidum*?**
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22. **Habitat complexity reduces parasitoid foraging efficiency, but does not prevent orientation towards learned host plant odours**
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23. **Learning-induced gene expression in the heads of two *Nasonia* species that differ in long-term memory formation**
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26. **Variation in plant defences among populations of a range-expanding plant: consequences for trophic interactions**
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29. **A tritrophic approach to the preference–performance hypothesis involving an exotic and a native plant**
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33. **Variation in herbivore-induced plant volatiles corresponds with spatial heterogeneity in the level of parasitoid competition and parasitoid exposure to hyperparasitism**
Poelman, E. H., Harvey, J. A., van Loon, J. J. A., Vet, L. E. M. & Dicke, M., 2013, In: *Functional Ecology*. 27, 5, p. 1107-1116
34. **Development of a hyperparasitoid wasp in different stages of its primary parasitoid and secondary herbivore hosts**
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50. **Behaviour of male and female parasitoids in the field: influence of patch size, host density and habitat complexity**
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51. **CREB expression in the brains of two closely related parasitic wasp species that differ in long-term memory formation**
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52. **Ecological fits, mis-fits and lotteries involving insect herbivores on the invasive plant, *Bunias orientalis***
Harvey, J. A., Biere, A., Fortuna, T., Vet, L. E. M., Engelkes, T., Morriën, W. E., Gols, R., Verhoeven, K. J. F., Vogel, H., Macel, M., Heidel-Fischer, H., Schramm, K. & Van der Putten, W. H., 2010, In: Biological Invasions. 12, 9, p. 3045-3059
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For more information contact:

PUBLIC OUTREACH, ECOLOGY MEETS ECONOMY!

See my TED-lectures (2009 and 2011) online: <http://www.tedxamsterdam.nl/2009/video-louise-vet-on-the-marriage-between-economy-and-ecology/>

Apart from my professional interest in high quality ecological scientific research, I promote ecological awareness to achieve a good marriage between ecology and economy. I am an optimist and believe in the power of positive action. Pointing to positive achievements is crucial to get things done in the future. It will stimulate positive awareness, additional action, creative solutions and multiple approaches, e.g. partnerships as a tool to conserve biodiversity. It will arouse political involvement and stimulate technical solutions where possible. It facilitates the achievement of consumer-driven demands that are very powerful to persuade or force industries to take their responsibilities.

Activities