

"NEW PERSPECTIVES" will take place at the historic Linnean Society of London on the 22nd & 23rd of October 2014. We are programming a total of 30 talks with key notes, core speakers, research talks, student talks and posters. In addition to contributions from experts from across the world we are keen that graduates, post graduates and early career researchers present their work in the form of short talks and posters.

"The tendril has done its work and has done it in an admirable manner"
Charles Darwin
1865 -*The movements and habits of climbing plants.*

A round table is scheduled for the (24th October) at the Royal Botanic Gardens, Kew. Objective: to foster collaborations and better integrate studies at different scales: from ecology and evolution to detailed studies of functional biology and development.

We invite applications for talks and posters for a two day meeting at The Linnean Society of London; speakers and registered participants are also welcome to attend the round table meeting at The Royal Botanic Gardens Kew. Please send applications for talks and posters to Dr. Nick Rowe at the address below. The deadline for this open call for papers – talks and posters – on all aspects of climbing plants is the 30th of June 2014. Registration details will soon be available on the Linnean Society website <http://www.linnean.org/>.

Contact: Dr. Nick Rowe
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New Perspectives on Climbing Plants

A three day conference on the ecology, evolution and functional biology of vines and lianas

Organised by
Nick Rowe and Thomas Speck

22nd-24th October 2014
At the Linnean Society of London
and the Royal Botanic Gardens, Kew.



Ecology, Evolution, Functional Biology, Biomechanics, Anatomy, Development, Biomimetics New Perspectives on Climbing plants

CONFIRMED SPEAKERS

Stefan Schnitzer, University of Wisconsin-Milwaukee, USA. (*Keynote speaker - Ecology*)

Wendy Silk, University of California, Davis, CA, USA. (*Keynote speaker – Functional Biology*)

Ernesto Gianoli, Universidad de la Serena, Chile. (*Core speaker – Ecology & Evolution*)

Veronica Angyalossy, Universidade de São Paulo, Brazil. (*Core speaker - Anatomy*)

Saara DeWalt, Clemson University, SC, USA. (*Core speaker - Ecology*)

Bill Baker, Royal Botanic Gardens, Kew, UK. (*Keynote speaker – Climbing Palms & Evolution*)

Robyn Burnham, University of Michigan, Ann Arbor, MI, USA. (*Core speaker – Ecology & Evolution*)

Nick Rowe, CNRS – “Botanique et Bioinformatique de l’architecture des plantes - AMAP”, Montpellier, France. (*Organiser*)

Thomas Speck, Botanischer Garten, Universität Freiburg, Germany. (*Co-organiser*)

Marcelo Pace, Universidade de São Paulo, Brazil. (*Core speaker - Evolution*)

Cloé Paul-Victor, Botanischer Garten, Universität Freiburg, Germany.

(*Core speaker – Liana growth and elevated CO₂*)

Jennifer Powers, University of Minnesota, MN, USA. (*Core speaker – Ecology*)

Sandrine Isnard, Centre IRD and Herbarium, Nouméa, New Caledonia. (*Core speaker – Liana biology*)

CONTEXT

CLIMBING PLANTS HAVE FASCINATED BOTANISTS for centuries: from the time of Darwin and his contemporaries up to the present. The significance of vines and lianas for the world’s ecosystems is under intense debate, particularly for tropical and sub-tropical environments. With ongoing studies indicating that vines and lianas are increasing in ecological importance, it is becoming increasingly necessary to renew, intensify and coordinate research on all aspects of climbing plants.

This meeting provides a renewed focus for the understanding of these fascinating and often bizarre plants. In a thematically diverse programme, world experts will explore the biology, ecology, evolution, functional biology, biomechanics, anatomy and development of vines and lianas. Our schedule will also include studies investigating the potential of climbing plant diversity for biomimetic research: an exciting example of the search for bio-inspired materials and technologies from the natural world.

QUESTIONS

IN A WIDE RANGING PROGRAMME covering three days at the Linnean Society of London and the Royal Botanic Gardens Kew, we will be addressing some of the major questions centred on climbing plants.

Why are climbing plants increasing in ecological importance?

What functional traits underlie this increase?

What are the mechanics, physics and chemistry behind attachment mechanisms?

What evolutionary patterns underlie this diversity and success?

How does climate change – increasing levels of atmospheric CO₂ – influence their growth?

What methods and tools (identification keys, data base technologies, ecological approaches, study plots, experimentation) do we need to develop and improve?

What properties of vines and lianas are useful for biomimetics research?
