

Flowers on the Tree of Life

Genetic and molecular studies have recently come to dominate botanical research at the expense of more traditional morphological approaches. This broad introduction to modern flower systematics demonstrates the great potential that floral morphology has to complement molecular data in phylogenetic and evolutionary investigations.

Contributions from experts in floral morphology and evolution take the reader through examples of how flowers have diversified in a large variety of lineages of extant and fossil flowering plants. They explore angiosperm origins and the early evolution of flowers and analyse the significance of morphological characters for phylogenetic reconstructions on the tree of life.

The importance of integrating morphology into modern botanical research is highlighted through case studies exploring specific plant groups where morphological investigations are having a major impact. Examples include the clarification of phylogenetic relationships and an understanding of the significance and evolution of specific floral characters, such as pollination mechanisms and stamen and carpel numbers.

LIVIA WANNTORP currently works as a researcher at the Swedish Museum of Natural History in Stockholm, where she leads several projects involving flower morphology and systematics of many different groups of flowering plants. She is Associate Editor of the journal *Plant Systematics and Evolution* and President of the *Swedish Systematics Association*.

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The Systematics Association promotes all aspects of systematic biology by organizing conferences and workshops on key themes in systematics, running annual lecture series, publishing books and a newsletter, and awarding grants in support of systematics research. Membership of the Association is open globally to professionals and amateurs with an interest in any branch of biology, including palaeobiology. Members are entitled to attend conferences at discounted rates, to apply for grants and to receive the newsletter and mailed information; they also receive a generous discount on the purchase of all volumes produced by the Association.

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Flowers on the Tree of Life

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