

Literature currently available on the population dynamics of insect herbivores tends to favour a top-down regulation of abundance, owing much to the action of natural enemies. This unique volume challenges this paradigm and shows that tree-dwelling species of aphids, through competition for resources, regulate their own abundance.

The biology of tree-dwelling aphids – particularly their adaptation to the seasonal development of their host plants – is examined. When host plant quality is favourable, aphids, by telescoping generations, can achieve prodigious rates of increase that their natural enemies are unable to match.

Using analyses from long-term population census and experiments, this book is designed to introduce students and research workers to insect herbivore–host dynamics using the interaction between aphids and trees as a model.

TONY DIXON is Emeritus Professor in the School of Biological Sciences at the University of East Anglia. He has written over 200 papers in scientific journals, on aphids and their natural enemies, and has written and edited 10 books. In 1992, he was awarded the Gregor Mendel Gold Medal by the Czech Academy of Science; in 2000 a medal of honour by Akademia Podlaska, Poland; and in 2001 became Laureate of the University of South Bohemia, Czech Republic.

The front cover shows the colourful autumn foliage of the maple *Acer palmatum* from a photograph taken by Professor K. Furuta. The insets are photographs of a winged parthenogenetic and unwinged sexual female of the sycamore aphid, *Drepanosiphum platanoidis*, taken by A. F. G. Dixon

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