University of Padova – Forest and Environmental Sciences
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Course: Insect ecology and biodiversity management

Prof. Andrea Battisti

DAFNAE - Entomologia

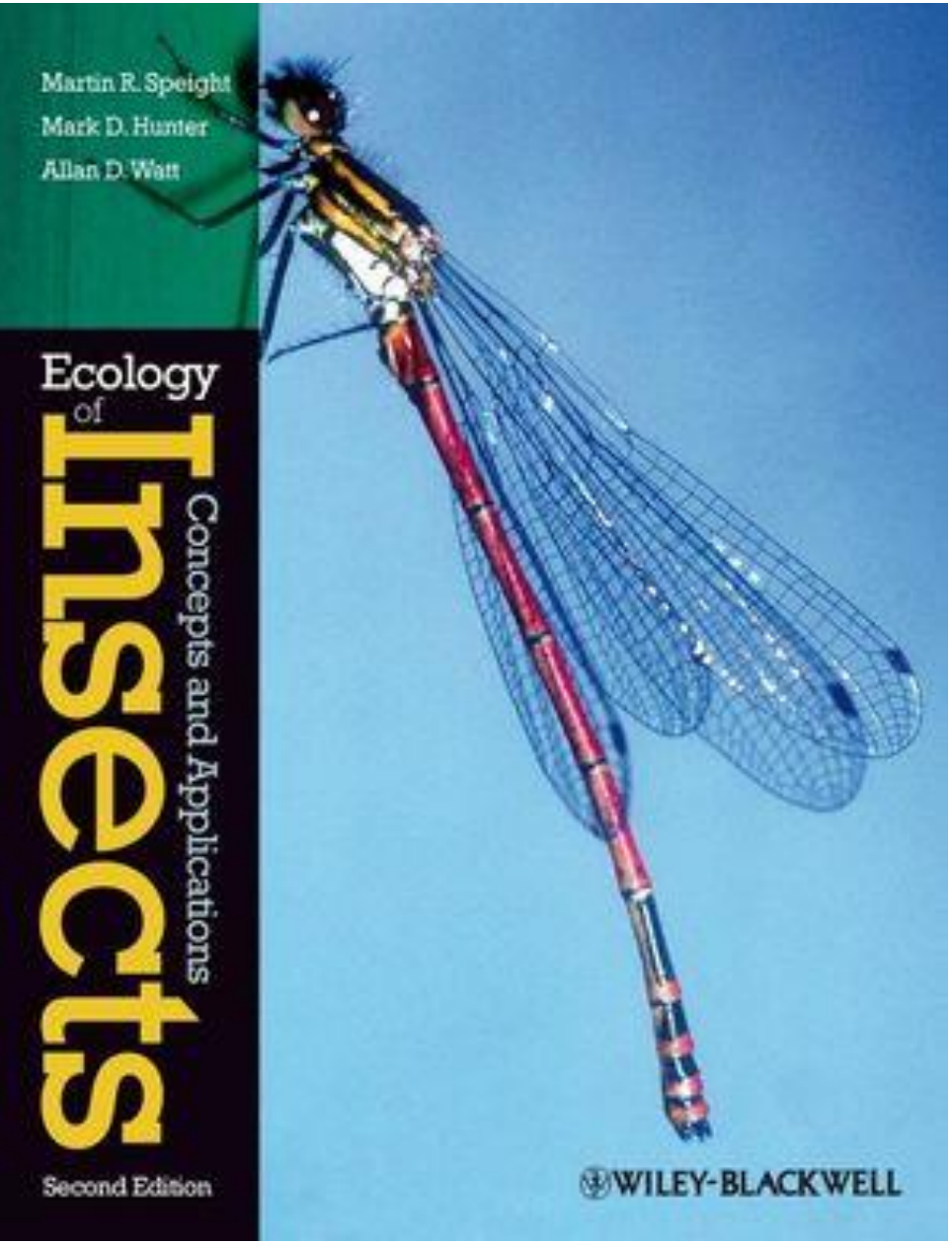
Agripolis: seconda stecca, secondo piano

e-mail: andrea.battisti@unipd.it

telefono: 049 8272804

fax: 049 8272810

Textbooks



1. An Overview of Insect Ecology.

2. Insects and Climate.

3. Insect Herbivores.

4. Resource Limitation.

5. Natural Enemies and Insect Population Dynamics.

6. Evolutionary Ecology.

7. Physiological Ecology.

8. Insects in Ecosystems.

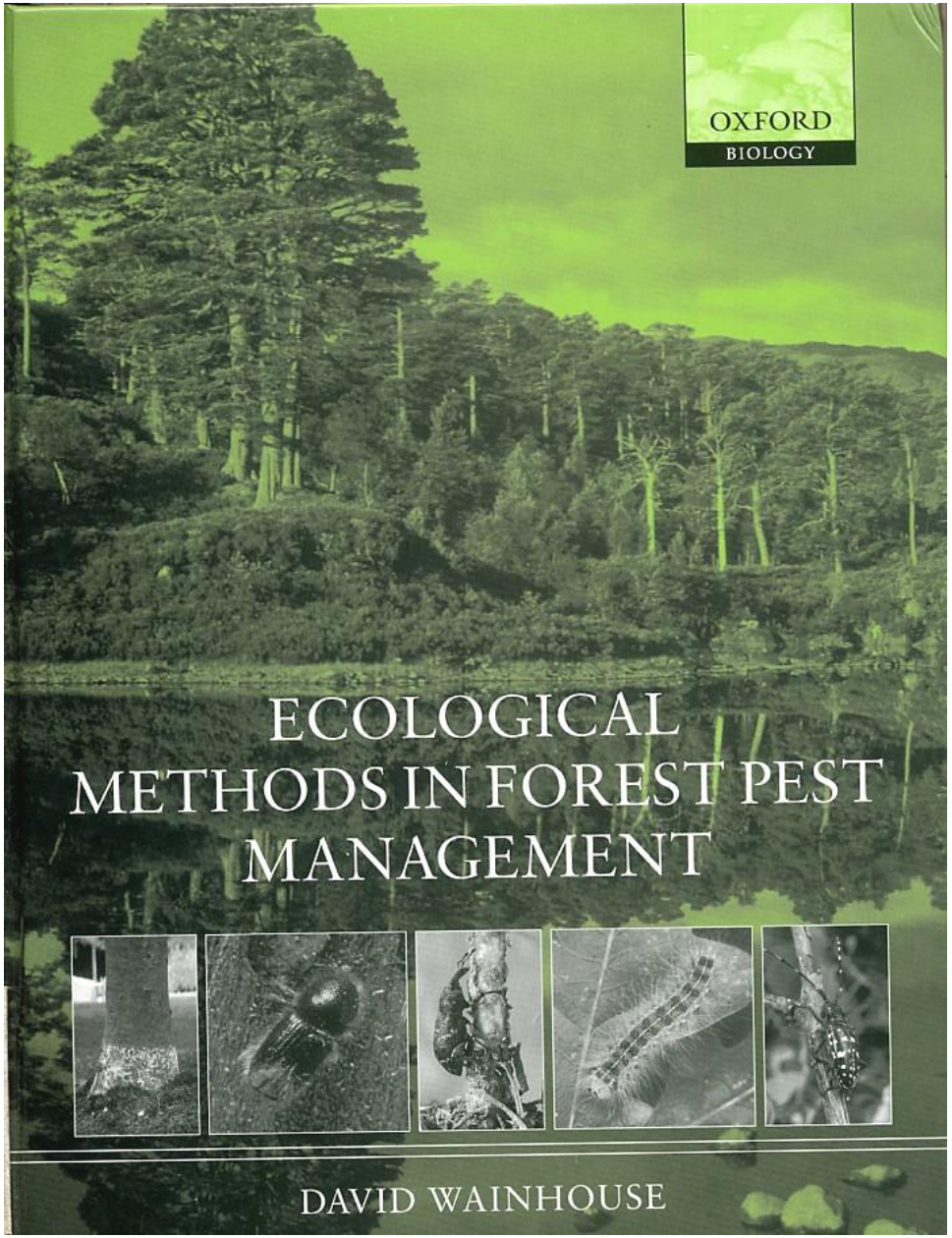
9. Biodiversity.

10. Insect Conservation.

11. Insects and Diseases.

12. Insect Pest Management.

Textbooks



Chapter 1 Forests and pest management

Chapter 2 Plant health

Chapter 3 Risk, monitoring and prediction

Chapter 4 The role of silviculture

Chapter 5 Resistance to attack by pests and pathogens

Chapter 6 Biological control

Chapter 7 Microbial control

Chapter 8 Semiochemicals

Chapter 9 Integrated pest management

Textbooks

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Learning objectives:

1. Biodiversity
2. Invasive species
3. Structure of forest insect communities and ecological guilds
4. Population dynamics of forest insect pests
5. How forest insects respond to abiotic drivers
6. How forest insects respond to biotic drivers: plant quality
7. How forest insects respond to biotic drivers: competition
8. How forest insects respond to biotic drivers: natural enemies
9. Ecological management of insect pest populations