1. Record Nr. UNINA9910626107403321 Autore Drake V. Alistair Titolo Radar entomology: observing insect flight and migration / / V. Alistair Drake and Don R. Reynolds Cambridge, MA, : CABI, 2012 Pubbl/distr/stampa 1-283-90350-4 **ISBN** 1-84593-606-X Descrizione fisica 1 online resource (515 p.) Altri autori (Persone) ReynoldsD. R <1947-> (Donald Russell) Disciplina 595.7 599.9 Insects - Migration Soggetti Entomology Radar in agriculture Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Contents; Preface; Acknowledgements; Specialist Terms, Symbols, Units and Abbreviations; 1 Introduction; 2 Remote Sensing and Insect Observation: 3 Radar Principles: 4 Insects as Radar Targets: 5 Entomological Radar Designs: 6 Observing Insects with Radar I: Performance, Surveillance and Target Characterization; 7 Observing Insects with Radar II: Quantitative Estimation and Parameter Retrieval; 8 Additional Radar, Radar-like and Radio Technologies for Insect Observation; 9 Insect Migration, its Quantification and the Role of the Atmosphere; 10 Insect Migratory Flight I: The Principal Features 11 Insect Migratory Flight II: Concentrations and Disturbances12 Insect Migration, Population Movements and Pest Management; 13 Migrations of Pest and Beneficial Insects; 14 Insect Foraging Movements; 15 Insect Echo on Meteorological Radars; 16 Radar Entomology: Perspectives and Prospects; Appendix A: Calibration and Performance Monitoring; Appendix B: Regulatory and Safety Issues; References; Index; A; B; C; D;

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Sommario/riassunto

Many of the world's most serious agricultural pests are highly

with insights into their movement and how they learn about and

migratory. Through the use of special-purpose radars we are provided

navigate through their environment. This text examines the behaviour and regional variations of these species, as well as the altitude of migration, concentration of insects in layers and how they respond to large and small-scale wind systems. The book relates radar observation of insect movement to complementary and competing methodologies and surveys its capabilities and limitations. It also deals wi