

1. Record Nr.	UNINA9911020335603321
Titolo	Olfaction in mosquito-host interactions // [editors, Gregory R. Bock (organizer) and Gail Cardew]
Pubbl/distr/stampa	Chichester ; ; New York, : John Wiley, 1996
ISBN	9786612347986 9781282347984 1282347985 9780470514948 0470514949 9780470514955 0470514957
Descrizione fisica	1 online resource (344 p.)
Collana	Ciba Foundation symposium ; ; 200
Altri autori (Persone)	BockGregory CardewGail
Disciplina	614.4/323
Soggetti	Mosquitoes - Control Smell
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Symposium on Olfaction in Mosquito-Host Interactions, held in collaboration with the World Health Organization at the Ciba Foundation, London, 31 Oct.-2 Nov. 1995"--Contents.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	OLFACTION IN MOSQUITO-HOST INTERACTIONS; Contents; Participants; Preface; Chairman's introduction; Introduction I: an overview of mosquito biology, behaviour and importance; Vector insects and their control; Genetics, ecology and behaviour of anophelines; General discussion I; Introduction II: olfactory control of mosquito behaviour; Odour plumes and odour-mediated flight in insects; Olfactory basis of host location by mosquitoes and other haematophagous Diptera; Selection of biting sites by mosquitoes; General discussion II The role of mosquito olfaction in oviposition site location and in the avoidance of unsuitable hostsIntroduction III: odours for host-finding mosquitoes; A search for components in human body odour that attract females of Aedes aegypti; Introduction IV: coding mechanisms in insect

olfaction; Structure and function of insect olfactory sensilla; General discussion III; Central olfactory pathways in mosquitoes and other insects; Sensory aspects of host location in mosquitoes; Endogenous factors regulating mosquito host-seeking behaviour; General discussion IV
Electrophysiological responses from receptor neurons in mosquito maxillary palp sensilla Responses of antennal olfactory receptors in the yellow fever mosquito *Aedes aegypti* to human body odours; The multiple role of the pheromone-binding protein in olfactory transduction; General discussion V; Genetic and molecular studies of olfaction in *Drosophila*; Synthesis and future challenges: the response of mosquitoes to host odours; Index of contributors; Subject index

Sommario/riassunto

This new work contains the first integrated discussion of the role of olfaction in mosquito-host interactions. It covers the practical applications of this knowledge in attempting to control malaria as a problem for world health. The volume begins with a general overview of mosquito life cycle styles and how odour-mediated host location fits into the repertoire of behaviours that a specific species may exhibit. Certain aspects of insect olfaction and its underlying physiological mechanisms are incorporated within the book.
