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The definitive guide to modern pesticide application methods for effective and sustainable crop protection As precision agriculture continues to evolve, Pesticide Application Methods serves as an essential reference for professionals in crop protection. With comprehensive and up-to-date coverage of pesticide application technologies, this leading guide covers the foundational principles of pesticide application whilst delving into advanced techniques that enhance efficiency, reduce environmental impact, and integrate seamlessly into sustainable agriculture practices. Drawing on decades of practical expertise, authors Graham Matthews and Roy Bateman provide a thorough grounding in both the theory and practice of pesticide application, ranging from traditional hydraulic sprayers to cutting-edge drone technology. The fifth edition of Pesticide Application Methods offers substantial new and updated content, reflecting the latest advancements in crop protection and application technology. This edition incorporates emerging practices in regenerative agriculture, with a focus on selecting pest-resistant crop varieties to reduce chemical dependency. New coverage includes unmanned aerial systems (UAS) for targeted application, electrostatic sprayers that minimise drift and enhance precision, and the integration of sustainable biopesticides and biorationals into pest management strategies. Throughout this edition, updated regulatory insights and training standards ensure that practitioners remain compliant with evolving safety protocols, including the EU "Green Deal" objectives on sustainable pesticide use. Continuing to set the standard for professionals in crop protection, Pesticide Application Methods, Fifth Edition: Offers in-depth guidance on modern pesticide application techniques, with a focus on sustainable practices and precision targeting Contains essential information on operator training, equipment maintenance, and certification requirements for pesticide application Features dedicated chapters on specialised techniques such as robotic applications and aerial spraying Provides guidelines for maintaining and calibrating application equipment to enhance longevity and efficiency Includes clear and practical diagrams, photos, and colour illustrations to enhance understanding of complex equipment and techniques Incorporating the latest research in Integrated Pest Management (IPM) and Good Agricultural Practice (GAP), Pesticide Application Methods, Fifth Edition is ideal for upper-level students in agricultural sciences, crop protection, entomology, and plant pathology programmes, as well as for crop protection specialists, plant scientists, agricultural consultants, and agrochemical industry professionals.