An international journal covering the management of weeds, pests and diseases through chemistry, biology and biotechnology

OUTLOOKS ON PEST MANAGEMENT

CONTENTS - February 2016

- I **Editorial** Leonard G. Copping, Editor
- 4 **Cardamom A Crop Cannot Run Away from Its Problems** Jeffery W. Bentley describes the problems facing the cardamom crop in Guatemala
- 7 **Regulatory News** new registrations, environmental effects and withdrawals
- The IR-4 Project Over 50 Years of Sustained Success Jerry Baron, Robert Holm, Daniel Kunkel, Paul H. Schwartz & George Markle summarise fifty years of successful research into sustainable crop protection in specialty crops and off-label uses
- 26 European Food Safety Authority (EFSA) Neonicotinoids and Bees Report Delayed Until 2017 Leonard G. Copping
- 29 **Biotechnology News** developments in molecular biology and genomics
- The Incidence and Ramifications of Glyphosate Resistance in Cotton Jason K. Norsworthy, Lauren M. Schwartz & L.Tom Barber explain the development of herbicide resistant weeds in GM cotton and strategies to counteract it
- **R&D News** reports on new products, new applications and new uses
- 39 Can We Expect New Herbicides with Novel Modes of Action in the Foreseeable Future? –
 Ken Pallett looks at the future prospects for new herbicide mode of action reflecting on 40 years of personal
 experience within herbicide research and development in both academia and industry explores the problems
 associated with new herbicide discovery
- 44 **Company News** reports on mergers, acquisitions, collaborations and sales
- 48 Calendar

COVER PHOTOS: Cotton bollworm (Helicoverpa zea) (Photo by Scott Bauer) and Aedes (Ochlerotatus) sp. mosquito on human skin both reproduced courtesy of USDA-ARS; Cocoa showing both frosty pod rot (Moniliophthora roreri) and witches' broom (M. perniciosa) on the same branch (Ecuador) (Photo by Roy Batemen); Unsprayed strip in sugarbeet showing poppies (Papaver spp.) (Photo by Alan Dewar)