

FIPRONIL: A NEW INSECTICIDE FOR URBAN PEST CONTROL MANAGEMENT

J. HOPE & T. ARNOLD

Rhône Poulenc, Lyon, France

Fipronil is a member of a new family of insecticides called phenyl pyrazoles. Rhône Poulenc scientists working at the Rhône Poulenc research station at Ongar in England discovered fipronil and identified its insecticidal properties in 1987. Fipronil, used at low doses, is a highly effective insecticide against a broad range of insect pests of crops, of animals and in public health.

Fipronil has both contact and ingestion activity. The mode of action of fipronil is that it interferes with the passage of chloride ions through the gamma-aminobutyric acid (GABA) regulated chloride channel, thereby disrupting CNS activity and, at sufficient doses, causing death. Because of its unique mode of action, fipronil is effective in controlling insects resistant to commonly used insecticides.

Fipronil has shown outstanding activity in the areas of public and animal health, and development work is ongoing with several different formulations, including baits and spray, for the control of ants, cockroaches, fleas and ticks, houseflies, locusts, mosquitoes, termites and other pests. At this time fipronil is either commercialised or under development for the control of fleas and ticks on cats and dogs, flies and ticks on cattle, mosquitoes, household insects like cockroaches, ants and termites.

A review of the activity of fipronil against a range of pest species is presented.

