Discovery and development of a new herbicide: the story of Bicyclopyrone

Leptospermone (1) was isolated in 1977 from the bottle brush plant and showed herbicidal activity (HPPD symptomology) albeit at a relatively high rate (5Kg/ha). Five years later aryl triketones of type (2) were discovered by Stauffer (a Syngenta legacy company) and showed the same herbicidal symptomology as Leptospermone. Optimisation led to the commercial product Mesotrione (3) which showed very good activity on a range of broad-leaf weeds in maize. A next generation HPPD inhibitor was sought with a broader weed spectrum i.e. grasses as well as broad leaf weeds. This lead to the discovery of Bicyclopyrone (4), a new maize selective broad spectrum herbicide.

CBC SEMINAR ANNOUNCEMENT

Professor Ian Aspinall
Syngenta

Date: 3rd April 2012 (Tuesday)
Time: 11am – 12:30pm
Venue: NTU SPMS CBC Building Level 2, Conference Room
Host: Asst Professor Philip Chan