

VIPCOT™ PROGRESS UPDATE**David Negrotto and Todd Martin****Syngenta****Research Triangle Park, NC****Abstract**

VipCot™ is the brand name for new transgenic insect control cottons from Syngenta and Delta and Pine Land Co. On August 24, 2004 D&PL entered into an agreement with Syngenta to develop and commercialize, novel technology primarily related to VipCot™. Development and registration is proceeding through cooperation between the two companies.

Vip3A, the insecticidal protein expressed in VipCot™, not only represents a novel mode of action in transgenic cottons, but it also exhibits a spectrum of comparable to the two gene *Bt* cottons. Upon commercialization of VipCot™, an insect resistance management strategy based on high dose insecticidal protein expression and structured refugia will be implemented to ensure good stewardship of this technology, as well as other technologies in the market place.

At the 2005 Beltwide Cotton Conference several presentations were given detailing aspects of VipCot™ development. Key talks were given by: Dr. Alan McCaffery – Insect Resistance Management for VipCot™, Dr Victor Mascarenhas – Field Studies of VipCot™ Support High Dose Efficacy Towards Tobacco Budworm, *Heliothis virescens*, Dr. David O'Reilly – Laboratory Studies Supporting High Dose, Dr. Eric Chen – *In vitro* Cross Resistance Studies with the Vegetative Insecticidal Protein Vip3A Support the Insect Resistance Management Strategy for VipCot™, Mr. Jay Mahaffey – Field Evaluation of VipCot™ Protected Cotton Cultivars: Seed Producer Priorities and, Dr. Tony Burd - Field Evaluation of VipCot™ Against Heliothines Under Natural and Artificial Infestations.

VipCot™ advantages include

1. Employs a recently discovered insecticidal protein (Vip3A) with a novel mode of action targeting unique binding sites
2. Low risk of cross-resistance to Cry toxins, so that its introduction is expected to enhance the sustainability of all transgenic lepidopteran-resistant cotton technology
3. Delivers high-level control of a broad spectrum of both old-world and new-world lepidopteran pests
4. Protects key structures of the plant, including the reproductive tissue responsible for yield

Delta and Pine Land Company and Syngenta are committed to the development of high yielding, high quality varieties containing the most advanced and environmentally friendly technology. We believe that VipCot™ fits into this plan very well.

VipCot is not currently registered for sale or use in the United States and it is therefore not being offered for sale. The present presentation does not constitute an offer for sale. VipCot will not be available for sale until EPA has approved registration and all necessary authorizations have been granted.

Acknowledgements

The authors thank Dr. Alan McCaffery for presenting this paper in their absence.