## Promoting Dudus through the Private Sector

The Kenyan horticulture sector is now the country's second highest earner of foreign exchange. Unlike many other exporters the sector relies heavily on small-scale producers, with over 50,000 farmers producing approximately 50% of the product. For these small-scale farmers export crops provide a vital source of income but pest problems are a constant threat to the crop. Traditionally, chemical control of pests and diseases has been advocated. Increases in the cost of chemical pesticides, pest resistance, toxicity problems and social concerns, combined with European legislation and standards on pesticide residues have, however, forced the Kenyan horticulture exporters to rethink their approach to pest management.

Throughout DFID's Renewable Natural Resources Research Strategy, the CPP has funded research into naturally occurring biological control agents of horticultural pests. The results have been very encouraging but the issue has been how to promote these technologies for the benefit of the poor. In 2002 CPP management decided that the answer lay in engaging with the private sector. That year two projects were initiated which brought together public sector researchers and Dudutech (K) Ltd. Established in 2001, Dudutech was the first biocontrol company in East Africa, and is already retailing registered products. Our partnership used previous CPP research findings to develop biopesticides targeted to control root knot nematodes (using the bacteria, Pasteuria



DBM damage on the leaves of Chinese cabbage



Diamondback moth (DBM) infected with granulosis virus are easy to spot as they are yellow rather than green

penetrans, and the fungus, Pochonia chlamydosporia) and the Diamondback moth (DBM) (using its Granulosis virus), as well as establishing essential facilities e.g. laboratories and greenhouses. This work is being developed using locally isolated micro-organisms in accordance with national regulations. Together, public-private partnerships have been instrumental in influencing biopesticide regulatory frameworks in Kenya.

In addition to the research, Dudutech has also trained smallholder farmers that grow produce marketed through Homegrown – the largest horticulture exporter in Kenya – in the use of natural biological control products. Once registered for sale in Kenya, these products should improve the livelihoods of over 70,000 rural people. Other companies have already started to show interest in developing and retailing natural enemies in the region. Produce handlers no longer have to work with dangerous pesticides, a fact that will be of great benefit to the environment and consumers of horticultural products.

**R8217**: Production of baculovirus to control lepidopteran pests in vegetable crops in peri-urban and rural areas

**R8218**: Production of *Pasteuria penetrans* to control root-knot nematodes (*Meliodognye* spp.) **Contact:** Luciano Rovesti, Dudutech, Kenya