PROJECT: Asian Vegetables – Best Practice

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Location: Darwin Region

Objective:

To support the Asian vegetable industry and its organisation.

Introduction:

The industry is centred near Darwin with 50+ small growers producing a range of Asian and traditional vegetables for local and capital city markets. The main thrust of work in this area this year has been to support the grower organisation and the industry development officer (IDO) and supply information on better practice farming techniques through grower meetings, field days and printed material.

Activities

Support the activities of Kim Bui, the Vietnamese speaking IDO. Unfortunately, the industry based and DPIFM funding ran out late in 2004 and was not renewed in spite of various attempts led by NTHA. Consequently, the Asian vegetable industry is without an IDO which has significantly curtailed planned work.

Distribute more copies of the English/Vietnamese publication of all current DPIFM printed information on Asian vegetables including the two-poster set of Pests and Diseases of Asian Vegetables. This publication has been well received in the NT and is in strong demand interstate in Asian vegetable growing areas.

Produced a working version of a PC based 'tool box' for agricultural pesticides for use in Asian vegetables in the NT in cooperation with Resource Protection. The prototype will be field-tested during the 2005-06 growing seasons.

Okra is affected by mould at the end of the season. A trial was conducted late in the 2004 dry season which confirmed dipping of okra after harvest with sodium hypochlorite solution at 100-400 ppm active would control post harvest moulds and improve appearance at market. This confirmed the results of the original trials conducted in the previous season and reported in the 2003-04 TAR. Storage was at 6ºC in normal packaging. Rates of 100-200 ppm active chlorine gave best visual results. A rate of 400 ppm caused some damage in the longer storage times and Benomyl gave no better results than water as in previous trials.

Snake bean production has been severely affected by Fusarium wilt in recent years with losses of over 70% in severe cases. Cowpea variety 'Iron' has been identified as an excellent rootstock for snake bean as it is vigorous, compatible with the current snake bean variety 'Green Pod Cochin' and resistant to both Fusarium wilt and root knot nematode, the two most damaging pests of snake bean in the NT.

Two demonstration plots of snake bean grafted onto 'Iron' cowpea were established on grower properties. Field walks were associated with each to demonstrate to growers both the resistance to Fusarium wilt and the superior growth and yield of the grafted plants over field planted seedlings.

Figure 1. The superior growth and yield of grafted plants on the left compared with the seedling plants on the right

There were plant losses to Fusaruim wilt disease in seedlings and no losses in grafted plants.

A small plot of ‘iron‘ cowpea was established at Coastal Plains Research Station to supply seed for rootstocks as commercial supplies are not readily available in the NT.

Weed control in snake beans at the seedling stage has been identified by growers as an important production issue. A demonstration plot of a pre-emergent residual herbicide was established and proved successful in suppressing most weeds. Sedges were not well suppressed and did not affect growth of direct seeded snake beans. Figure 2 shows the weed suppression after two weeks. Control began to break down after four to six weeks due to the light sandy soils.

Photo 1: 0 – nil

Photo 2: 1 - Stomp® @ 1 L/ha

Photo 3: Stomp® @ 3 L/ha.

Photo 4: Nil weed control after five weeks (note weed control in background by Stomp® @ 3 L/ha)

Figure 2. Weed control two weeks after treatments

Bamboo trial work is being completed and data is being collated for a final report. A number of grower field days were conducted to show current bamboo growers the latest results.