

Appendix II

SUMMARY OF FINAL REPORT

PHILIPPINES

- Banana variety “Lakatan (AAA)” was used for selection of mutants against BBTV 10 promising lines for BBTV but only 5 selected lines will be tried for multi location trials. The lines are 25-28-2, 7-29-1, 22-28-1, 9-28-1, 9-28-2, 6-30-1, 6-30-2, 13-30-2, 23-30-2.
- 5 selected lines will be tried for multi location trials on 4 sites for 2 cropping seasons until 2010
- 3 promising mutant lines were identified resistant to nematode. The lines are 2-45, 4-45, 10-45.
- All these 3 lines will not be screened in the field because of budget constraint but will be kept and maintained in *in vitro* cultures

VIETNAM

- Banana variety “Tay (ABB)” was used with meristem as the starting material
- Doses for main experiment were 10 and 20 Gy with LD50 at 10 Gy and LD100 at 50 Gy
- Pre-selection of mutants with resistance to FOC was carried out with artificial inoculation of FOC spore suspension. Best treatment for soaking rooted *in vitro* plantlets was at 2 hours
- From pre-screening 2 mutant lines were identified and will be planted in February 2009 at 2 different locations (central and north Vietnam) until 2010
- Name of mutant lines are – II-47 and II-58

MALAYSIA

- “Berangan (AAA)” variety was used.
- *In vitro* rooted plantlets were soaked in FOC spore suspension at 10^6 spore/ml and the plantlets that survived the treatment were selected for field trials in hot spot.
- There are 3 promising mutant lines identified as tolerant / resistant against *Fusarium oxysporium* f. sp. *ubense* (FOC). Doses for field experiment were 20,30 and 40 Gy.
- Mutants with improved agronomic characteristics such as high yielding, early flowering and dwarf were identified.
- Multi-location trials in collaboration with commercial plantations will be carried out until 2010

BANGLADESH

- Banana variety “Sabri (AAB)” was used. Irradiation doses were at; 10, 20, 30, 40, 50, 60, 70, 80 and control. LD50 was at 35 Gy and LD100 was 70 Gy. Selection was for mutants resistant against FOC.

- A total of 2664 M₁V₄ plants were transferred from *in vitro* condition to the earthen pots filled with *Fusarium* infected soil (collected from the hot spots) and kept under greenhouse condition for screening and preliminary selection.
- After pre-selection, field screening will be conducted for survived plantlets of cv. “Sabri” in 2009 until 2010
- Multi-location trials will be carried out in 2011 and 2012
- A total of 49 plants were regenerated from anther-derived calli/embryoids from “Bichikala (BB)” out of that 32 survived in the potted condition during acclimatization and finally transplanted to the field for further study (variation study by morphological and molecular characterization).