QUARTERLY REPORT
INDIAN INSTITUTE OF SPICES RESEARCH
(Indian Council of Agricultural Research)
P.B. No. 1701, Marikunnu P.O., Calicut – 673 012, Kerala

Programme Area/Head	**Outlay* (April – June 2005)**	**Output**	**Outcome**	**Time Frame**
A. Financial Plan	**210 lakhs (2005)**			
Non Plan	**386 lakhs (Proposed for 2005-06)**			
Total	**600 lakhs.**			
B. Physical (Works, Equipment, etc.)	**180 lakhs.**			
C. Technical				
1. Conserving plant genetic resources	Maintenance of 5300 accessions of spices in field genebank and 600 in *In vitro* besides seedling progenies of vanilla. Field planting of 400 accessions of black pepper and newer collection of cinnamon and garcinia *Ex vitro* establishment of 100 seedling progenies of Vanilla	5300 accessions and 600 seedlings maintained Filed germplasm bank established Field bank of improved seedling progenies	World's largest gene bank maintained Potential materials for improvement Improved vanilla varieties	Continuous 2010 March 2010
2. Variety improvement in yield in view of biotic & abiotic stresses	Screening seedling progenies of black pepper against *Phytophthora capsici*. Characterization of *Pythium*.	Screening of progenies of 29 accession for resistance 29 isolates of Pythium will be charcterized	Resistant/tolerant lines Taxonomy will be understood	March 2006 December 2005

	Screening of cardamom accessions for mosaic disease. Amplification and cloning and *Badnavirus* infecting black pepper	High yileidng progenies of will be characterized for reaction to Mosaic. Portion of ORF1 and 3 have been cloned and sequenced	Resistant/tolerant lines will be developed Taxonimic identity of the badna virus will be known	March 2006 March 2006
3 Production technology & protection technology for crops	Study of gas exchange parameters in high and low yielding black pepper accessions. Grading of 63 black pepper accessions for grade and bulk density. Analysis of curcuminoids of the released turmeric varieties. Assay of soils (0-15 and 15-30 cm) of organic farming plots of pepper (Peruvannamuzhi) and ginger (Narikad) for urease amylase and cellulase enzymes. Identification of Length of Growing Period (LGP) at IISR Experimental Farm, Peruvannamuzhi. Measuring nitrate reductase activity in *Azospirillum* applied treatments of black pepper	Gas exchange parameters will be measured in 50 accession. Various grades of pepper berries will be identified in pepper accessions. Curcminoid pattern will be studied Soil quality in different management system will be understood. The probable time of sowing will be understood Efficiency of Azosprillum will be quantified	Drought tolerant lines will be identified Acessions with best grade will be identified Best accessions containing high content will be identified Soil quality index will be developed Helps in developing crop planning INM using Azospirillum can be developed	Dec.2005 March 2006 March 2007 March 2007 July 2005 March 2007

	Evaluation of bacteria and plant products against root mealy bugs of black pepper	IPM strategies to manage root mealy bugs will be developed	Control measures for root mealy bug will be developed	Dec.2006
2. Production of quality breeder seeds/ planting material	Production of 1.5 lakh rooted black pepper cuttings for Andaman and Nicobar Islands	Planting material of high quality and disease freeness will be produced	The tsunami affected Andaman areas will be planted	Aug.2005
3. Cropping system research for productivity enhancement	Java Long Pepper + Arecanut Intercropping System – Yield analysis	Inter cropping system using Long pepper will be developed	Return/area will be enhanced	March 2006
3. Diversification	Standardisation of Fresh ginger based products.	Various products and the recipes using various combinations will be developed.	Value added product from ginger will be developed for commercial used	March 2006
4. Training and retraining	Training programme on good agricultural practices, Intellectual property right and seed act	Farmers will be trained on the improved/latest methods	Farmers will be aware of IPR and GAP which will enhance the agricultural production	March 2006
5. Demonstrations for technology update	Preparation and use of organic manures	Farmers will be trained on organic farming	It will enhance the farmers capability	March 2006
6. Training of farmers, farm women, trainers, etc.	Quail rearing, Vermicomposting, Pest and disease management in coconut, Goat rearing, Cultivation of fodder grass, Rubber production technology, Nutrition garden	Women enterpreuners will be given preference and will be trained on these techniques	Women empowerment	March 2006