

PROJECTS OF 2005-07 BATCH of M.Sc (BIOTECHNOLOGY)

Sl. No.	Name	Title of Project	Name of Institutions
1	CHINMAYEE MOHAPATRA(W)	<p>Title : Marker assisted selection & SSR of bacterial blight resistance gene(Xa21,Xa13 & Xa5).</p> <p>Brief : Inthis study, both parents i.e.Lalat(susceptible parent) and IRBB 60(gene pyramid of IR 24 carrying resistance gene xa-5,xa-13 and xa-21) and the newly developed gene pyramids in the background of Lalat(carrying different combination of resistance genes) were analyzed by PCR with Sequence Tagged Site(STS) markers RG556, RG136 and pTA248 for xa-5,xa-13 and xa-21 respectively.</p>	<p>CRRI, Cuttack.</p> <p>Guide: G.J.N.Rao</p>
2	ANWESHA CHATTERJEE(W)	<p>Title : PCR based molecular diagnosis of Leprosy(M. leprae).</p> <p>Brief : The project describes the PCR analysis of tissues for M.leprae DNA provides a valuable means for identifying this organism. Mutation in M.Laprae genome those are associated with resistance to different drugs used against this pathogen have been identified. So it is regarded as the PCR is the better diagnostic tool for the detection of leprosy at an early stage. The primer Ri & Rn are very specific for M.Laprae & were absent in 20 other mycobacterail species.</p>	<p>Dr.B.C.Ray Institute of Postgraduate & Medicinal Research, Kolkata.</p> <p>Guide : Dr.Basudev Bhattacharya. (Senior Faculty, Deptt of Biochemistry & Biophysics)</p>
3	ANURADHA KUMARI(W)	<p>Corelation of MIU, MBV by Serology through advance chmiluminescence with real time PCR.</p>	<p>C.M.R.I(B.M.Birla) Kolkata.</p>
4	CHRISTINA PRIYANKA SEKAR(W)	<p>Title : Phytochemical investigation of Litsea gluinosa & evaluation of its biological activity.</p> <p>Brief : The project aims at finding the never therapentive agents from herbs, the phylachemical and antiinflamatory studies of the plant, litsea glutinose linn(lauraceae) has been taken for investigation. The bark was extracted and the % yield, colour and the consistency of the extract was observed. The extract was analysed for the presence of various groups of phyloconstituents.The study showed the presence of carbohydrates, proteins, tannins, saponins, steroids & alkaloids.</p>	<p>Utkal University, Dept. of Pharmaceutical Sciences, BBSR.</p> <p>Guide : Dr.Sagar Kumar Mishra</p>
5	SWAGATIKA SAHU(W)	<p>Title : Effect if inorganic & bioorganic fertilizers on the growth of hybrid papaya under pot culture condition .</p> <p>Rrief : The project describes organic fertilizers along with fungi were applied on plants growing in greenhouse. It was found that the mixed treatment of organic fertilizers and fungi showed good morphotical characters like survivility, shoot, root ratio, stem biomass etc. Different organic fertilizers were used for experiment.</p>	<p>R.P.R.C.,BBSR</p> <p>Guide : Dr.(Mrs)Nibha Gupta (Sr.Scientist)</p>
6	SHAHILA PARWEEN(W)	<p>Title : Pharmacoproteomics: study of the effect of herbal drugs in the cancer of Male Wistar Rats.</p> <p>Brief : The project shows rat models challenged for monitoring the hepatoprotective action of natural products which shows considerable results. SGPT, SGOT are also increased in Silymarin & Extract treated group. Sudden decrease in serum enzymes after challenging with hepatotoxins(AAF,CCI4) in extract treated group. Total protein content was seen to decrease when assayed at different time interval.</p>	<p>Jamia Hamdard, New Delhi.</p>
7	ANIKET RAKSHIT	<p>Effects of plant product as biopesticides on Sitophilus oryzae.</p>	<p>Indian Statistical Institute,Kolkata.</p>
8	SMRUTI DAS(W)	<p>Title : Biochemical characterization of wild variety of Rice.</p> <p>Brief : The project describes Rice is one of the staple food in Asia where it provides 40% - 70% of food calories. The quality of the seed is a major determination of the qquantity of the o/p of the corp. Riceseed yield are detrimentally affected by lodging results in difficult and prolonged harvesting. The poorly filled gain may have high gain moisture content, lower specific weight and it may even have sprouted and be discoloured due to pathogenic activity. The objectivity of the study is to characterize the changes in biochemical, seed p pattern of storage proteins in seed of wild species of rice under controlled and accelerated aging condition.</p>	<p>C.R.R.I., Cuttack.</p> <p>Guide : Dr.Prameela Krishnan. (Sr Scientist)</p>

9	JAYDEEP CHAUDHURI	Gene expression during host pathogen interaction.	Indian Institute of Chemical Biology.
10	SWARANIKA PODDAR(W)	Title : Nanosilica drug against silk worm efficacy & molecular mechanism of action. Brief : The project describes that in the sericulture industry, BmNPV, which is a pathogen of the mulberry silkworm Bombyn mori, is of great economic concern. Till now there is no permanent presentive method for the occurrence and the spr the effect of nanosilica drug on silkworm larvae which was infected by Bombyn mori nucleopolyhedrosis virus(BmNPV)	Indian Statistical Institute,Kolkata Guide : Dr.Arunava Guswami. Head Nanobiotechnology Lab
11	SAUMYA BANDYOPADHYA Y(W)	Title : Construction of cDNA libraries: generation of ESTs for heat stressed variety of Pigeon pea. Brief : Pigeon & the young leaves were frozen immediately at liquid N2 for total RNA extraction using Trizol method. mRNA is present in very less quantity in the total RNA cDNA was also prepared from the extracted mRNA by reverse transcription & amplified by PCR.	I.A.R.I., New Delhi. Guide : Dr.R.C.Bhattacharya.
12	SUJAYA NAYAK(W)	Characterization & isolation of microbes present in 30 ton heap	Institute of mineral & material technology (IIMT),BBSR.
13	KAUSAR E RAHAMAN	Title : Industrial microbiology & quality control. Brief : The project shows that yeast culture in large scale in large fermenter requires various analysis like quality of molasses, determination of fermentation capacity of yeast strain growth rate etc. The molasses used for fermentation was characterized by various test like test for dry matter, total reducing sugar, fermentable sugar, nitrogen phosphorus content etc. All these test of the molassed quality will ultimately effect the yeast production.	Kalyani yeast, Kalyani. Guide : Mrinal Chakraborty. Manager ? Q.C
14	SUJATA DASH(W)	Title : Effect of bioinoculants on the growth of hybrid Drum stick (PKM-I) & its Rhizospheric microflora under greenhouse condition. Brief : The project describes the effect of Bioinoculants on the growth of hybrid drumstick(PKM1) & its Rhizaspheric Microflora under green house condition was studied. Analysis of growth parameters such as no. of leaves, root length, % of germination, no of leaflets, ratio of root & shoot length were done by taking averages, standard deviation & test of significance experimentation of bioinoculants on Hybrid Drumstick has been found that applications of microbial sources are beneficial as compared to chemical fertilizers for the plants.	R.P.R.C.,BBSR. Guide ; Dr.Nibha Gupta. Sr.Scientist.
15	LOVALIN BHOI(W)	Molecular characterization & finger printing of Breast cancer gene by AP-PCR.	Sangene Biotech PVT,LTD
16	RUCHIRA SAHA(W)	Title : Real Time PCR & its applications. Brief : The project describes the Traditional PCR is measured at the end points(plateau). While use of real time PCR in collecting data in the exponential growth phase. In this case the cleared probe provides a permanent record amplification of an amplicon. No post PCR processing due to closed system i.e.no electrophoretical separation of amplified DNA.	B.M.B.H.R.C., Kolkata. Guide : Dr.Indranil Roy

17	ASHUTOSH GUPTA	<p>Title : Identification of Hepatitis C Virus in blood sample from HCL injected & HIV co injected Patients.</p> <p>Brief : In this project HCV is known to have marked genetic heterogeneity and it was estimated to have a nucleotide substitution rate between 1.44×10^{-3} & 1.92×10^{-3} substitution site per year. Accumulation of nucleotide substitution in HCV genome results in the diversification & evolution of the different genotypes. There is increasing evidence that patients injected with different HCV genotype may have different clinical profiles, severity of liver disease & response to interferon alfa therapy.</p> <p>In this study the positive samples found out by ELISA are again screened by Tridot rapid test. The RNA was isolated & amplified. The genotyping was done following the Ohno T method in which 2 different mixtures of primers are used for specific genotyping.</p>	<p>I.C.M.R Virus Unit Kolkata.</p> <p>Guide : Dr.Provash Chandra Sadhukhan. (Research Officer)</p>
18	BIJOYA DATTA CHOWDHURY(W)	<p>Title : Effect of nanoparticles on Tilapia species & studied on their molecular behaviour.</p> <p>Breif : The project shows that Aquaculture particularly inland fishing is a vital source of protein & income. Tilapia Fish(Oreochromis mossanilices & O niloticus) is of great economic importance in fishing industry & is highly commercial. It is diurnal & mainly feeds on phytoplanktons & alga. Such conditions can be created in vitro to observe the effect of surface modified nanoparticles. In the present study the beneficial effect of surface modified nanosilicas have been done & also to see the effects on the growth of tilapia fishes.</p>	<p>Indian Statistical Institute,Kolkata.</p> <p>Guide: Dr.Arrunava Goswami. Head Nanobiotechnology Lab.</p>
19	URAKSHI(W)	Studies on optimization of regeneration & transformation of Brassica oleracea with PBECK 2000.3 & RAPD analysis.	Jamia Hamdard, New Delhi.
20	UTPAL MANDAL	Antitumour promoting activity of Diphenyl methyl selenocyrate	C.NC.I., Kolkata.
21	REKHA YADAV(W)	Isolation & characterization of PSB from LD stage.	R.R.L., BBSR.
22	KAUSTAV CHOWDHURY	<p>Title : Agroeutamotoxic nanoparticle used to control stored grain pest tested on Sitophilus oryzae. Brief : The project shows development of nanosilica soil to be used as pesticides. These pesticides would not leave toxic residues or contaminate the soil. The mode of action of these nanosilica to be used as pesticide has been studied. The secondary products of plant like alkaloids,pyrithrins which are insecticidal in nature along with nanasilica can be potential pesticides without detrimental effect on environment.</p>	Indian Statistical Institute,Kolkata.
23	SONALI PATTNAIK(W)	To identify phylogenetic relationship among Nymphaea,Nelumbo,Euryale using RAPD & ISSR marker.	R.P.R.C.,BBSR
24	RUPESH KUMAR HOTA	<p>Title : Zymographic detection & clinical correlation of MMP in the plasma/sera of cervical cancer patient.</p> <p>Brief : The project describes that Cervical cancer is a malignancy of cervix and it stands as the second most common cancer in terms of both medicine & mortality. Elevated expression of MMP-2(Gelatinase A) & MMP-9(Gelatinase B) was seen in human cancer, including cervical carcinoma. MMP ? 2 & MMP ? 9 are inactive proenzymes that undergo activation followed by cleavage of an NH-2 terminal prodomain. MMPs are considered as the key enzyme that plays a key role in tumor cell invasion & metastasis</p>	<p>Sangene biotech Pvt. Ltd.,</p> <p>Guide : Shins.K Jose</p>
25	SUBHASH LAHIRI	<p>Title : Temporal expression of E.R in the development of Malphigian tubules of D. melanogaster.</p> <p>Brief : The project describes Analogous organ of vertebrate renal tubule in the prosophila in malphigian tubules which perform osmoregulatory roles. Complex regulatory pathways are associated with the multiple cell types present in tubules. The metamorphosis pathway of the insect is carried out by steroid hormone ecdysone/ ECR/USP complex activates downstream processes signal pathway. In this work the specific requirements is Malphigian tubules.</p>	<p>Cytogenetic Lab Dept. of Zoology, B.H.U</p> <p>Guide : Dr.(Mrs) Madhu Gwaldas Tapadia.</p>

26	APURBA CHHOTARAY(W)	<p>Title : Detection of Aflatoxin +ve strains & quantification of aflatoxin from <i>Aspergillus flavus</i> strains.</p> <p>Brief : The project shows that <i>Aspergillus flavus</i> was cultured on B-CD-PDA medium that produced aflatoxin. The isolates produced yellow pigment which turned pink when ammonia solution was added to it. Addition of an excess of any acid converts black colour to yellow indicating that the pigments which form the basis for this test, thereby acting as a pH indicator dye. Isolates were classified as low, intermediate & high producer of aflatoxin on the basis of intensity of pink color produced by them.</p>	<p>C.R.R.I, Cuttack.</p> <p>Guide : Dr.S.K.Mohanty. Principal Scientist</p>
27	AMBARISH PRASAD DAS	<p>Study of genetic diversity of <i>Machilus bombycina</i> with molecular marker RAPD.</p>	<p>R.R.L Jorhat.</p>
28	SMITA BISI(W)	<p>Title : Study on development of Zinc tolerant plant <i>N.tabaccum</i>.</p> <p>Brief : This project is for better understanding of adaptation of metal tolerant plant, propagation of zinc tolerant plants can be useful for mine reclamation. This study helps to understand the basic mechanism of metal uptake. The plants were grown on MS medium supplemented with BAP & zinc.</p>	<p>R.P.R.C., BBSR.</p> <p>Guide : Dr.S.K.Palai. (Asst.Floriculturist)</p>
29	IPSITA MOHANTY(W)	<p>Analysing the genetic diversity of the family ?Annonaceae? using molecular marker.</p>	<p>R.P.R.C,BBSR</p>
30	SHAISTA JAHAN(W)	<p>Title : Correlation of MTB in microbiological technique & real time PCR in Molecular Biology.</p> <p>Brief : The project describes <i>Mycobacterium Tuberculosis</i> is the etiologic agent of tuberculosis in human whereas <i>M.bovis</i> is the etiologic agent of TB in cows & rarely in humans. Humans can also be infected by the consumption of un-pasteurized milk. The bacterium was detected by ZN staining.</p>	<p>C.M.R.I., Kolkata.</p> <p>Guide: Dr.Indrani Roy.</p>
31	JYOTIRMAYEE SWAIN(W)	<p>Title : Microbial analysis of post methylated distillery effluent & wet land treatment. Brief : The project aims at the physicochemical parameters decrease manifolds after sequential treatment with bacteria and wetland plants. This was studied by analyzing the Distillery Effluent in Sequential Treatment with Bacteria and Wetland plants. The reason of the decrease being the digestion of complex compounds and heavy metals in the root nodules of the wetland plants, which contains Rhizospheric Bacteria in them. Thus, the uptake of these compounds reduces the Physico Chemical parameters to a great extent.</p>	<p>I.T.R.C., Lucknow</p> <p>Dr.Ram Chandra.</p>
32	PRIYANATH MUKHOPADHYA Y	<p>Title : Effect of Dopamine on IGF1 induced growth of stomach cancer growth line (AGS).</p> <p>Brief : The project describes the human stomach tumor cells contain a number of different growth factor receptors through which the tumor cells can exert considerable influence on the growth kinetics of stomach tumor. Dopamine, a catecholamine neurotransmitter, is present in considerable amount in the normal human stomach tissues. This dopamine controls different physiological functions of stomach including protection of gastric epithelial tissues from ulcer induced injury. The present study shows the inhibition of physiological concentration of dopamine on proliferation of human gastric cell line AGS.</p>	<p>C.N.C.I</p> <p>Guide : Dr.Partha Sarathi DasGupta (Sr. Scientific Officer)</p>
33	DEBASMITA DIKSHIT(W)	<p>Title : Shoot regeneration from the axillary bud of <i>Phyllanthus amarus</i> callus induction from leaf.</p> <p>Brief : The project shows the Micropropagation of medicinal herb <i>Phyllanthus amarus</i> was done using nodal segments. Induction of callus from leaves of <i>P.amarus</i> was chosen as the experimental material because of its multiple medicinal use. It also has hepatoprotective properties. Fresh roots are said to be beneficial in jaundice. The latex is applied to offensive sores & ulcers.</p>	<p>I.M.M.T, BBSR</p> <p>Guide :Dr.M.Thirunavoukkar asu. (Scientist)</p>
34	DEBASMITA GIRI(W)	<p>Standardization of protocol for invitro propagation of <i>Solanum melongena</i>.</p>	<p>O.U.A.T,BBSR</p>

35	PURNIMA PRIYADARSHANI NANDA (W)	<p>Title : Physiological drought moisture stress on rice variety.</p> <p>Brief : The project describes Drought, which is known as to cause substantial reduction in the economic yield of crop plants. In this study attempt has been made to develop a relationship between the mechanism involved in the drought tolerant rice varieties by taking 3 rice varieties i.e Anjali, Salumpikit and N22 with some objectives. The objectives are : To study the water relation and photosynthesis efficiency of the rice varieties under moisture stress and to study the biochemical changes like photosynthesis accumulation, oxidation/antioxidation enzymes and the change in protein profile under moisture stress.</p>	<p>C.R.R.I,Cuttack</p> <p>Guide : Dr.Padmini Swain (Senior Scientist)</p>
36	UPAGYA SAH(W)	<p>Title : Nanocapsule mediated Drug delivery in oxidative damage in rats.</p> <p>Brief : The project describes that the cerebral ischemia causes reduction in oxygen supply to the brain that leads to quick fall in cellular ATP biosynthesis. This causes increase in intracellular Ca²⁺ dependent enzymes that exert irreversible damage to neural cells. Thus to protect the neuronal cells which are now prone to oxidation free radicles attack, attempts were made to introduce biological antioxidant.</p>	<p>I.I.C.B.,Kolkata</p> <p>Guide : Dr.Nirmalendu Das. Scientist, Asst. Director.</p>
37	JAYANTI DEEPA(W)	Immobilization enzyme kinetics on nanometals & approach to biotransformation.	Indian Institute of Chemical Technology, Hyderabad
38	MADHUMITA BEHERA(W)	<p>Title : Invitro micropropagation of some variety of Lycopersicon esculentum</p> <p>Brief : The project shows that under invitro condition shoot generation is obtained either through callus or directly from the cultured explants by passing the callus phase hycopersicon esculentum has shown direct regeneration of shoots from nodal explants as well as leaf explants. This indicates that the basic regulatory mechanism in balancing the auxins & cytokinins. The choice of explants depends on age of organ, explanting season & size of the explants composition of culture media play an important role in callus mediated plant regeneration.</p> <p>Several factors influencing bud break followed by multiple shoot proliferation in L.esculentium will be useful for developing a reproducible protocol towards rapid mass propagation as well as formulating as efficien strategy for exsitu conservation of this valuable plant species as immense nutritional significance.</p>	<p>Utkal University Botany Dept.</p> <p>Guide : Prof.(Dr.)S.P.Rath.</p>
39	TAPASWINI MOHANTY(W)	<p>Title : Effect of coal fly ash on phenotypical & biochemical changes in wheat.</p> <p>Breif : The project describes that the fly ash is of vital importance in agriculture as it is conducive for plant growth. Leaves of coal fly ash treated plants showed higher level of chlorophyll ? a,b, total chlorophyll & carotenoid content. The experimental results indicates that the coal fly ash has very less effect on the germination of wheat seeds.</p>	<p>R.P.R.C.,BBSR</p> <p>Guide: Dr.Bandita Deo. Scientist</p>
40	RUDRAKSH SOVAN PANDA	<p>Title : Genome wide survey for QTL associated with root knit nematode.</p> <p>Brief : The project describes the use of microsatellite in conjunction with bulk segregation analysis(BSA) to identify microsatelite marker(s) linked to root knot nematode resistance gene present in the resistant variety, Ramakrishna. Recombinant inbred lines(F9) derived from the cross between resistant parent Ramakrishna & susceptible parent Annapurna were used as mapping population for identification of DNA makers linked to nematode resistance genes.</p>	<p>C.R.R.I., Cuttack.</p> <p>Guide : Dr.Sarat ch Sahu & Dr.Lambodhar Behera.</p>

41	SAURABH TRIPATHY	<p>Title : Chemical analysis of Artemisia nilagirica by solvent extraction method & its bio-evaluation.</p> <p>Brief : The project shows that Bioassay guided solvent extraction from the leaves of Artemisia Nilagiric suggested that activity is localized in methanol extract of the plant. Methanol extract denotes the polar group of chemicals present in the plant which are responsible for the bioactivity.</p> <p>Methanol extract was found to be the most active at a higher dose of 200mg/10ml and also at 100mg/10ml of saline. Fraction of the same was collected using column chromatography. As the three fractions are nearby fractions it is possible that all of them have the same active principles.</p>	<p>R.P.R.C., BBSR.</p> <p>Guide : Dr.Sunita Bhatnagar. (Scientist)</p>
42	SAROJINI ROUT(W)	<p>Title : High yielding variety performance.</p> <p>Brief : The project describes how to evaluate eleven high yielding rice varieties for physiological basis of higher productivity. The shorter duration varieties(70-90 days) and the medium duration varieties(120-135 days) exhibit grain and straw yield with the strong correlation with the attributes like plant height, tiller number per hill, leaf area index, dry matter accumulation, more number of grains per panicles, 1000 ? grain weight, relative growth rate, crop growth rate and net assimilation rate but negatively correlated with panicle length.</p>	<p>C.R.R.I., Cuttack</p> <p>Guide : Dr.Annie Poonam (Scientist)</p>
43	RINKY RANI DEY(W)	<p>Title : Effect of chemicals to identify the viability on yielding.</p> <p>Brief : The project describes the effect of water stress on the vegetative and reproductive growth of various rice varieties has been studied. Under water stress the biochemical aspects and especially biochemical root traits were identified to be the reason for water stress(deficit)tolerance in some rice varieties.</p>	<p>C.R.R.I., Cuttack.</p>
44	NIHAR RANJAN OJHA	<p>Title : Biochemical analysis of medicinal rice.</p> <p>Brief : The project describes that the starch in some rice samples is not completely digested and in some it is quite poorly digested. The starch content present in the so called medicinal rice variety Gudmatiya is very poorly digested. When a diabetic patient consumes the Gudmatiya rice variety, the L-amylase present in the body doesn?t degrade the starch present in it as quickly as it does in other rice varieties. This results in the lowest release of sugar into the blood stream. Hence, the blood sugar level suddenly doesn?t rise up as in the case of diabetic consuming other rice varieties.</p>	<p>C.R.R.I,Cuttack</p> <p>Guide : Dr.S.G.Sharma (Principal Scientist & Head).</p>
45	SAMEER BISWAL	<p>Title : Immunoassay for HIV detection & confirmation.</p> <p>Brief : The project shows the HIV1/HIV2 are the ethological agent for causing AIDS. The use of highly sensitive A6 assay is an established approach is serodiagnosis of HIV infection & in the screening of blood & blood products.</p>	<p>N.I.C.E.D.</p> <p>Guide : Dr.M.K.Saha. (Asst.Director)Virology Department.</p>
46	ANIMIKH RAY	<p>Title : Prevalance of Carbapeniase in nonlactose/ late lactose fermenting Gram negative bacteria.</p> <p>Brief : The project describes Carbapenems, which are very effective, broad-spectrum,B-lactum antibiotics, have been rendered virtually useless by the onslaught of carbapenemase, a defence mechanism which has made pathogens resistant to antibiotic treatment. This study is aimed at measuring the spread of carbapenemase and has been carried out at a super-speciality hospital of Eastern India.</p>	<p>C.M.R.I, Kolkata.</p> <p>Guide : Dr.T.K.Ghosh</p>
47	LELINPRAVA SAHOO(W)	<p>Study of Biotic & Abiotic stress of Musa acuminate cv.patakpura & identification of protein marker.</p>	<p>R.P.R.C,BBSR</p>
48	PUSPESH KUMAR	<p>Title : Environmental monitoring & microbial analysis of finished product & raw material.</p> <p>Brief : The project describes environmental monitoring for various diseases like hepatitis, foot and mouth disease has been done by water analysis and microbial analysis for finished and raw products of a pharmaceutical lab called Alkem. The various tests include MLT(Microbial limit test), BET(Bacterial endotoxin test), water analysis etc.</p>	<p>ALKEM Laboratories</p> <p>Guide : U.J.Upadhyay. (DGM ? HRD, Alkem Labs)</p>

49	SUBHADRA PANIGRAHI(W)	<p>Title : Study of life tube & cytoplasmic incompatibility of Aedes which infect.</p> <p>Brief : This project was done to see the clearance of Wolbachia a symbiotic & protobacteria present in Aedes aegypti Black eye(Liver pool) strain by tetracycline and the effect of its on the life of Aedes aegypti(LV)strain and cytoplasmic incompatibility. The presence of Wolbachia affects on the fecundity of the mosquito and also its causes cytoplasmic incompatibility was observed.</p>	<p>R.M.R.C,BBSR</p> <p>Guide : Dr.N.Mahapatra & Dr.R.J.Hazra (Sr.Research Officer).</p>
50	LALIT NARAYAN PANDIT	<p>Title : Micropropagation of Banana</p> <p>Brief : This study helped to understand the regeneration potential of Musa Parasidica. If incompetency to acclimatization causes mortality, then this will occur during primary hardening & the plantlets are transferred to secondary hardening. Production of chlorophyll is enhanced during hardening.</p>	<p>Sarat biotech,BBSR.</p> <p>Guide : Dr.Sarat Chandra Sahu. (Scientist)</p>
51	SOUMYAA KAR(W)	Genetic identification of Drought resistance lines of Sweet Potato through DNA markers	R.P.R.C.,BBSR
52	PRIYANKA SAHU(W)	<p>Title : Phylogenetic study of different cultivar of Banana through RAPD marker.</p> <p>Brief : The project describes different cultivars for banana have been analysed taking in account the disease resistance. Various techniques like DNA sequencing, DNA fingerprinting have been applied to see the genomic difference between different cultivars with respect to disease resistance.</p>	<p>R.P.R.C,BBSR</p> <p>Guide : Dr.A.B.Das (Sr.Senior)</p>
53	MONALISA SWAIN(W)	Incidence of occurrence of intestinal parasite among school going children of BBSR.	R.M.R.C,BBSR
54	ABANIKANTA SAHU	Alteration in RBSP3 gene is responsible for development of cervical cancer.	C.N.C.I., Kolkata.
55	SAUMENDRA KUMAR PRADHAN	<p>Title : Detection of Dengue virus. Brief : The project describes that dengue virus serotype 1,4,3 can be detected serologically by antibody detection using E/M specific capture IgM and IgG ELISA. Various molecular techniques like nested amplification of a primary product generated with universal dengue virus primers, hybridization of universal RT ? PCR product etc.</p>	<p>I.C.M.R., Kolkata.</p> <p>Guide : Dr.Shyamalendu Chatterjee. (Asst.Research Officer)</p>
56	RASMITA BHOL(W)	<p>Title : Phytochemical investigation & biological evaluation of plant extract.</p> <p>Brief : In this study the plant Vitex peduncularis was thoroughly investigated for its phytochemical and pharmacological properties as this plant is popularly used for treatment of malaria and blackfever. Potential anti-inflammatory activity against initio rates as compared to standard drugs was investigated in this study. The plants extract can be used in humans after thorough toxicity.</p>	<p>Utkal University, Dept. of Pharmaceutical Sciences, BBSR.</p> <p>Guide ;Dr.S.K.Mishra.</p>
57	DEBABRATA MOHANTY	<p>Title : Detection of morphological & molecular characterization of Fussarium</p> <p>Brief : The project aims at certain tolerant cultivators of rice towards the disease Bakanae caused by Fusarium sp has been studied. It was found out that the tolerant cultivators are genetically diverse from others and difference in the DNA bonds were studied.</p>	<p>CRRI, Cuttack</p> <p>Guide : Dr.(Mrs) Urmila Dhua.Sr.Scientist, CRRI, Cuttack.</p>
58	PRANGYA PARAMITA MOHANTY(W)	<p>Title : Biochemical characterization of seed viability in cultivated rice.</p> <p>Brief : This experiment was conducted to find out the biochemical changes during cell deterioration. The seed deterioration in rice cultivars also depends upon the type of storage proteins present in them. These proteins were characterized by using SDS PAGE. The cultivars of rice were classified according to seed deterioration taking SDS PAGE analysis of stored proteins.</p>	<p>C.R.R.I,Cuttack.</p> <p>Guide : Dr.Prameela Krishnan. (Sr Scientist)</p>
59	AMRITA KAR(W)	Studies on genetic assessment of different species on Lythraceae family through molecular markers.	R.P.R.C, BBSR
60	NISIGANDHA MISHRA(W)	Resistant plant of polymorphic loci	C.R.R.I,Cuttack

61	PRASANTA KU DWIVEDY	<p>Title : Effect of different fertilizer on the growth of papaya under green house condition.</p> <p>Brief : The RI variety of carica papaya grown in different fertilizer application, exhibited various growth response in terms of physiological growth & development as well as biochemical changespartening to protein & polyphenols. The polyphenols in particular is responding to be used for sex determination of papaya.</p>	<p>R.P.R.C,BBSR</p> <p>Guide : Dr.U.C.Basak (Scientist)</p>
62	MANASI KUMARI SWAIN(W)	<p>Title : Phylogenetic relationship among different species under family Rubiaceae through RAPD marker</p> <p>Brief : This investigation was carried out with the intention of finding out the genetic relationship among the 15 cultivars belonginh=g to 8 genus of Rubioceae family. RAPD markers were used to study the genetic variation exixting among these different cultivars. The study included the optimization of primers. This study gives a knowledge about the family for further plant breeding & cultivation of important species.</p>	<p>R.P.R.C,BBSR</p> <p>Guide : Dr.G.R.Rout. (Senior Scientist)</p>