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**Grain Yield and Water use Efficiency of Rice as Influenced by  
Transitions in Rice Cultivation in Krishna Western Delta  
Command Area of Andhra Pradesh**

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**ABSTRACT**

In the farmers fields of Modukuru No.2 branch canal command of Krishna Western Delta, Guntur District of Andhra Pradesh, different lowland rice production systems have been studied for their grain yield and water use efficiency during *Kharif* 2005 and 2006. Among the rice production systems, System of Rice Intensification (SRI) recorded highest mean grain yield (6900 kg ha<sup>-1</sup>) followed by Semi-dry Rice (6300 kg ha<sup>-1</sup>) and rotational system of irrigation (5900 kg ha<sup>-1</sup>) when compared to farmers practice of growing rice with continuous flooding (5000 kg ha<sup>-1</sup>). SRI also resulted in higher mean water use efficiency (11.5 kg ha.mm<sup>-1</sup>) when compared to farmers practice of flood irrigation (4.5 kg ha.mm<sup>-1</sup>).

**Key words** : Efficiency, Grain yield, Rice, Transitions.

**Response of Bt cotton in Synchronizing N and K Supply with  
Crop Demand to Enhance Nutrient Use Efficiency**

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**ABSTRACT**

A field experiment was conducted during the year 2007-08 at Regional Agricultural Research Station, Lam to study synchronizing effect of N and K supply with crop demand to enhance Nutrient use efficiency. Growth and yield contributing characters differed significantly as time of application and number of splits differed. Plant height and number of bolls increased on application of N with K. The highest seed cotton yield and Benefit Cost Ratio (BCR) was recorded by applying N with or without K in three splits *i.e* at 15, 45 and 75 DAS which was on par with T<sub>4</sub>, T<sub>5</sub>, T<sub>8</sub> and T<sub>9</sub> but significantly superior over the rest of the treatments. The highest seed index (9.4 g) has been recorded with three splits *i.e* at 15, 30 and 45 DAS. Application of N with or without K in three splits *i.e* at 15, 30 and 60 DAS recorded highest lint index. Ginning Out Turn (GOT) has been increased significantly on application of N with K and the magnitude of increase was to the tune of 8.6%. However, N and K application did not exert any significant impact on fiber quality

**Key words** : Cotton, Nitrogen, Potassium, Split application.

**Multivariate Analysis of Genetic Diversity in Cotton  
(*Gossypium hirsutum* L.)**

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**ABSTRACT**

Genetic divergence was assessed among 72 genotypes of cotton based on 18 traits using Mahalanobis' D<sup>2</sup> statistic, cluster analysis and principal component analysis. Eight and nine clusters were obtained for Mahalanobis' D<sup>2</sup> statistic and cluster analysis, respectively. In PCA seven principal components

were identified, out of which first five principal components explained 76.5% of variability in cotton. The principal component analysis (PCA) enabled loading of similar type of variables on a common principal component.

**Key words :** Cluster Analysis, Cotton, D<sup>2</sup> analysis, Principal Component Analysis

## **Principal Component and Cluster Analyses in *Kabuli* Chickpea (*Cicer arietinum* L.)**

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### **ABSTRACT**

Thirty genotypes of *Kabuli* chickpea were evaluated to study genetic divergence by using principal component and cluster analysis. These genotypes were grouped into 6 clusters. Principal component analysis identified four principal components with Eigen values more than the one contributed 88.88 per cent of the cumulative variance. The genotypes selected from the above analysis were Dollar, ICCV- 95334, ICC-5320 and ICC-4929 which appear to be desirable for inclusion in crossing programme aimed for improvement of *Kabuli* chickpea.

**Key words :** Cluster Analysis, Genetic Divergence, *Kabuli* chickpea, Principal Component Analysis.

## **Nature of Gene Action for Yield and Yield Components in Sugarcane (*Saccharum spp.*)**

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### **ABSTRACT**

Moderate to high estimates of phenotypic and genotypic coefficients of variation (PCV and GCV) were recorded for shoot population at 120 DAP, stalk population at 240 DAP, plant height at 240 DAP, number of millable canes, cane yield, sugar yield while the estimates of PCV and GCV were low for single cane weight, per cent juice sucrose and diameter of cane. Estimates of heritability and genetic advance over mean were moderate to high for plant height at 240 DAP, shoot population at 120 DAP, stalk population at 240 DAP, single cane weight, number of millable canes, cane yield and sugar yield suggested the importance of additive gene action for the inheritance of the characters. Moderate to high heritability and low to moderate estimates of genetic advance over mean for length of millable cane per cent juice sucrose and diameter of cane indicated the operation of non-additive gene action for length of millable cane, diameter of cane and per cent juice sucrose.

**Key words :** Gene Action, Sugarcane Genetic Parameters.

## **Correlation and Path Analyses over Environments in Blackgram [*Vigna mungo* (L.) Hepper]**

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### **ABSTRACT**

Correlation and path coefficient analysis were carried out using 12 genotypes of blackgram in six environments. Days to 50% flowering, days to maturity, plant height, number of primary branches per plant,

number of pods per plant, pod length, number of seeds per pod, 1000 seed weight, yield kg/plot and protein content were positively correlated with seed yield per plant over environments. The positive correlation of plant height, pod length, 1000 seed weight and yield kg/plot with seed yield per plant and among themselves for these characters was observed suggesting that these are the major yield contributing traits in blackgram. Path coefficient analysis also showed direct positive contribution of yield kg/plot, number of primary branches per plant, 1000 seed weight and number of seeds per pod on seed yield. These traits deserve special emphasis in selection while selecting for improvement in seed yield of blackgram.

**Key words** : : Blackgram, Correlation, Path Analysis.

## **Correlation and Path Analyses over Environments in Greengram [*Vigna radiata* (L.) Wilczek]**

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### **ABSTRACT**

Correlation and path coefficient analyses carried out using twelve genotypes of mungbean grown under six different environments involving ten quantitative traits revealed that number of pods per plant had significant association with seed yield per plant in all the six environments at phenotypic and genotypic levels. Number of seeds per pod exhibited significant positive association with seed yield per plant in all the environments at both levels except in environment 3. Number of clusters per plant exhibited significant positive association with seed yield per plant in all environments both at phenotypic and genotypic levels except in environment 2 and 4. Seed yield per plant had a significant positive association with days to 50% flowering, plant height and number of primary branches per plant in all environments except in environment 1 at genotypic level. Path coefficient analysis showed direct positive contribution of number of pods per plant, number of seeds per pod, plant height and number of primary branches per plant in majority of environments. These traits deserve special emphasis in selection while selecting for improvement in seed yield per plant of greengram.

**Key words** : Correlation, Greengram, Mungbean, Path Analysis.

## **Selection of Parents Through Genetic Divergence in Rice (*Oryza sativa* L.)**

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### **ABSTRACT**

Forty eight diverse genotypes of rice were evaluated for the selection of parents using Mahalanobis'  $D^2$  statistic for the improvement of yield and quality. The genotypes were grouped into fifteen clusters. The maximum inter-cluster distance (1855.88) was recorded between Cluster XIV and XV and minimum inter-cluster distance (47.74) was recorded between Cluster III and V. The genetic diversity was not related to geographic diversity. The characters *viz.*, plant height, panicle length, days to 50 per cent flowering, 1000-grain weight were mainly responsible for genetic divergence. Based on divergence studies, the genotypes Velluthachera and Heera in addition to popular and locally adopted varieties could be considered for getting the transgressive segregants for high yield and quality.

**Key words** : Genetic Divergence, Rice, Quality, Yield.

## **Effect of Wild Abortive and ARC Sources of Male Sterile Cytoplasm on Yield and Yield Components of Rice Hybrids**

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### ABSTRACT

Thirty- two aF<sub>1</sub> and thirty- two bF<sub>1</sub> rice hybrids were evaluated in two seasons to study the effects of wild abortive and ARC sources of male sterile cytoplasm on grain yield and yield components. The study indicated that in general, sterile cytoplasm exerted more negative effects on plant height and spikelet fertility percent, while positive effects were predominant on panicle length, 1000-grain weight and harvest index. Eleven aF<sub>1</sub> hybrids viz., IR62829A x Samba Mahsuri, IR62829A x IR46, IR62829A x WGL3962, IR58025A x Vajram, IR58025A x Samba Mahsuri, IR67683A x Vajram, IR67683A x Samba Mahsuri, IR67683A x IR64, IR67683A x Vijetha, IR67683A x WGL3962 and APMS1A x WGL3962 consistently showed superiority for yield and yield components when compared to their fertile counterparts. Wild abortive cytoplasm induced more positive effects on yield and yield components even though it had sporophytic male sterility system. The negative effects of gametophytic male sterility system (ARC) are stronger than that of sporophytic male sterility system (wild abortive) and this may be attributed to the availability of high frequency of restorer lines to CMS lines of WA cytoplasm. The cytoplasmic effects were found to be cross specific and can be improved through appropriate selection of parents. The negative effects of sterility inducing cytoplasm are only relative when the combination has high combining and restoring ability as observed in APMS1A x WGL3962. Among the three CMS lines of wild abortive cytoplasm, IR67683A was found to be promising as it showed pronounced positive effects on yield and yield components.

**Key words :** ARC Cytoplasm, Cytoplasmic Effect, Wild Abortive Cytoplasm, aF<sub>1</sub> and bF<sub>1</sub> hybrids.

## Variability and Associations Among Components of Slow Rusting to Leaf Rust in Wheat

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### ABSTRACT

It may never been possible to prove the effectiveness of any type of resistance to all races of the pathogen, there are reports that slow rust resistance is long lasting. Experiments were conducted for two seasons during 1998-99 and 1999-2000 with leaf rust pathotype 77-5 (*Puccinia recondita* f.sp. *tritici*) at Indian Agricultural Research Institute, New Delhi to study slow rusting of six leaf rust resistant varieties. Wheat variety Agra Local was used as susceptible check. The rust resistant varieties showed highly significant phenotypic variability for each component of slow leaf rusting (latency period, uredial size and uredial number) at adult stage of plant growth under glasshouse and area under disease progress curve in field conditions. All the varieties expressed long latent period, small uredial size and uredial number than the fast rusting, Agra Local. All the varieties also showed less AUDPC values compared to Agra Local. Positive correlation between uredial size and uredial number and negative correlations between latency period and uredial size, and latency period and uredial number suggested that the components of slow rusting resistance were either tightly linked or under pleiotropic gene control. AUDPC was negatively associated with latency period and positively with uredial size and number. So both the components of slow rusting as well as AUDPC can be used suitably as selection criteria in breeding programmes aimed at resistance to leaf rust. Kundan, Galvez-87 and Trap showed stable and high degree of slow rusting resistance as compared to the fast rusting, Agra Local in both the seasons and can serve as slow rust resistance donors in wheat breeding programmes.

**Key words :** AUDPC, Latency Period, Slow Leaf Rusting, Uredial Number, Uredial Size.

## Effect of Carbofuran on Phosphomonoesterase Activity in Red and Black Soils using Gingelly as a Test Crop

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### ABSTRACT

A pot culture experiment was conducted in red and black soil to evaluate the effect of insecticides on soil phosphomonoesterase (acid phosphatase and alkaline phosphatase) activity using Gingelly as a test crop. The soil applied insecticide viz., Carbofuran @ 1.65 and 3.3 kg ha<sup>-1</sup> along with a untreated control in red soil and Phorate @ 3.3 kg ha<sup>-1</sup> and 6.6 kg ha<sup>-1</sup> along with untreated control in black soil were used in the study. The results indicated that Carbofuran applied @ 1.65 kg ha<sup>-1</sup> (recommended dose) resulted in significant increase in the acid and alkaline phosphatase activity from 0-45 days after sowing. Both the phosphatases exhibited three to four fold increased activity at its peak compared to control. Application of Phorate at higher rates (3.30 kg ha<sup>-1</sup> in black soil) resulted in reduced activity of acid and alkaline phosphatases. The decreased activity might be related to proteolysis of non-stabilized extra-cellular enzymes.

**Key words** : Carbofuran ,Gingelly, Phosphomonoesterase activity.

## **Micro Nutrient Status of Some Rice Soils of Andhra Pradesh in Relation to Soil Properties**

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### **ABSTRACT**

The physicochemical properties and status of micro nutrients in the intensively rice growing soils representing from eight districts of Andhra Pradesh under Krishna-Godavari zone, Nagarjuna Sagar project area and Telangana region were assessed. The relationship between various soil properties and available micro nutrients was studied for better manipulation and to obtain sustainable crop yields of rice. The results of the study revealed that the soils varied widely in texture (scl to c), neutral to slightly alkaline (pH 6.35 - 8.22), non saline (EC 0.14 - 2.23 dS m<sup>-1</sup>) having low to high in org. C (0.46-1.17%), 220-418, 8.38-18.68 and 114-373 kg/ha of available N, P and K, respectively. It was observed that Zn deficiency is severe in all the districts of the study, whereas other micro nutrients (Fe, Mn and Cu) were above the critical limits. The available micro nutrients showed significantly negative relationship with pH and sand fraction and significantly positive relationship with clay, organic carbon content of the soil. It was found that the soil pH and organic carbon were the major contributing factors towards the availability of various micronutrients and hence, maintenance of organic matter and pH of the soil is essential to sustain the soil fertility and to enhance the crop productivity.

**Key words** : Micro nutrients, Rice, Soil properties

## **Response of Blackgram to Residual Phosphorus application to Rice in Rice-Blackgram Cropping System**

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### **ABSTRACT**

A field experiment was conducted during 2004-05 on sandy loam soil at Agricultural College Farm, Bapatla to study the effect of additional dose of phosphorus applied to rice on the yield, nutrient uptake and soil availability status of succeeding black gram. The results indicated that the additional dose of 10, 20 and 30 kg P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup> at tillering and 10, 20 and 30 kg P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup> at primordial initiation stage significantly increased the dry matter production, seed and haulm yield of black gram over the recommended dose of phosphorus applied as basal. The additional doses also gave significantly higher content and uptake of nitrogen and phosphorus of succeeding blackgram over the recommended dose of phosphorus (60 kg P<sub>2</sub>O<sub>5</sub> ha<sup>-1</sup>) applied as basal.

**Key words** : Cropping System, Phosphorus Application, Rice

## **Efect of U V Protectants on the Pathogenicity Growth and Spore Production of *Beauveria bassiana* (Bals) Vuil.**

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### **ABSTRACT**

Ultra violet(UV) protectants,viz.,charcoal(1%) Indian ink (1%)congo red (1%)robin blue (0.5%),and Yeast extract 2% were evaluated for their effect on the bioefficacy of *Beauveria bassiana* (Bals) Vuill at its LC<sub>50</sub> (9.4 x 10<sup>4</sup> spores ml<sup>-1</sup>) against the third instar larvae of *Spodoptera litura* (Fabricius) after exposing them to UV-light (30 minutes, one hour and three hours,. Further, the fungal growth and spore protectants resulted significantly higher larval mortalities (20.61 to 71.20%), fungal growth (1.40 to 7.77 cm diam.) and spore production (8.75 to 617.5 x10<sup>4</sup> spores ma<sup>-1</sup>) after 30 minutes to three hours of exposure to UV-light. The LT<sub>50</sub> values for *B.bassiana* at its LC<sub>50</sub> with and without any UV-protectants ranged between 91.2 to 194.4 hours after 30 minutes to one hour exposure to UV-light. Whereas, the LT<sub>50</sub> values of *B.bassiana* at its LC<sub>50</sub> with charcoal (1%) and Indian ink (1%) were 235.2 and 242.4 hours after three hours of exposure to UV-light, respectively.

**Key words :** *Beauveria bassiana*, Charcoal, Congo red, Indian ink, Robin blue, *Spodoptera litura*, UV-protectants, Yeast extract.

## **Relative Efficacy of Antibiotics on Larval and Cocoon Parameters of Silkworm Infected with *Bacillus thuringiensis* var. *kurstaki***

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### **ABSTRACT**

Among six antibiotics tested, with "norfloxacin" lowest larval mortality (22.43%), highest larval weight (3.01 g), cocoon weight (1.67 g), shell weight (0.27 g) and shell percentage (15.92%) was noticed. Among different concentrations used at 1500 ppm concentration the larval mortality was lowest (32.82%). Among different methods of application of antibiotics tested, with spraying highest cocoon parameters were reported, and also the larval mortality was reduced.

**Key words :** Antibiotics, *Bacillus thuringiensis* var. *kurstaki*, Bacterial flacherie, *Bombyx mori*, Sericulture,Silkworm, Norfloxacin

## **Influence of Growth Regulators and Nutrients on Yield and Yield Components in Soybean(*Glycine max* L)**

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### **ABSTRACT**

An experiment was conducted in FRBD (Factorial Randomized Block Design) with two main factors and eight sub factors to know the effect of growth regulators and nutrients on yield components in different cultivars of soybean at college farm, Agricultural college, Bapatla during rabi 2005-2006. Of allthe treatements Triacontanol @1ml L<sup>-1</sup> recorded maximum yield (24.72 q ha<sup>-1</sup>), followed by SA @ 10 ppm (24.06 q ha<sup>-1</sup>) and NAA@ 10 ppm (23.04q ha<sup>-1</sup>) over control (20.06 q ha<sup>-1</sup>) .

**Key words :** Growth regulators, Nutrients, Soybeans yield components , Yield.

## **Effect of Growth Regulators and Nutrients on Growth, Yield and Yield**

## Attributes of BlackGram under Upland Conditions

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### ABSTRACT

The effect of different growth regulators viz ., GA<sub>3</sub> , NAA,SA and triaccontanol nutrients viz ., KNO<sub>3</sub> and urea on growth , yield and yield attributes of blackgram under upland conditions was studied in the present investigation at agricultural college farm , bapatla during rabi 2006. The results revealed that KNO<sub>3</sub> treatment @ 1 % significantly increased the seedling vigour and morphological parameters like no.of leaves per plant and no.of branches per plant,yield and yield parameters in blackgram .

**Key words** : Blackgram, Growth regulators,Yield and Yield attributes.

## Disease Scenario of Mango in Andhra Pradesh

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### ABSTRACT

Mango, the king of fruits is one of the most popular fruit. A systematic survey of mango orchards in Krishna Godavari zone of Andhra Pradesh was conducted during the crop season from 1999-2000 to 2007-08. It was observed that mango is affected by a number of diseases at all stages of its growth right from leaf to the fruits in storage or transit. Major yield losses were due to fungal diseases viz., *Anthraco* leaf spot, red rust, bacterial leaf spot, powdery mildew, fruit rot and *Diplodia* blight. Of all the diseases Anthracnose disease has major importance and manifest it self as leaf spot , blossom blight and fruit rot and the Per cent Disease Index (PDI) ranges from 1.4 to 37.56. Red rust and bacterial leaf spot diseases recorded in almost all years in moderate to severe form while the powdery mildew disease incidence was in traces only.

**Key words** : Disease scenario – Mango

## Biochemical and Molecular Characterization of *Erwinia* Species Causing Tip-over Disease of Banana

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### ABSTRACT

Tip-over disease caused by pectolytic *Erwinias* is becoming a serious threat to banana plantations. Several workers in the past have reported it to be caused by *Erwinia carotovora* subsp *carotovora*, *Erwinia carotovora* subsp *atroseptica*, and *Erwinia chrysanthemi*. Morphological, biochemical and molecular studies were carried out to identify the exact cause of the disease. Of the nine isolates from different agro climatic regions of Karnataka and Andhra Pradesh, two isolates were similar to *Erwinia chrysanthemi* and the remaining isolates were similar to *Erwinia carotovora* subsp *carotovora*. Further, restriction fragment length polymorphism also showed the presence of two groups. Polymorphic banding pattern was obtained using *Alu I* and *Rsa I* enzymes indicating variation among isolates. It was found that *Erwinia carotovora* subsp *carotovora* is distributed in moderate climatic conditions where as *Erwinia chrysanthemi* is distributed in warmer regions. Thus the distribution and spread of *Erwinia* species is found to be influenced by environmental conditions.

**Key words** : Banana, Biochemical characterization, *Erwinia*, RFLP, Tip-over disease.

## Genetic Variability in Different Tamarind Genotypes

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#### **ABSTRACT**

Thirty eight tamarind genotypes studied were found to exhibit wide range of variability for most of the characters. The phenotypic and genotypic coefficient of variability (GCV and PCV) were low for the characters like pod length, width and thickness. Remaining characters exhibited moderate to high PCV and GCV. The higher PCV and GCV were found to be with pod yield and number of pods per tree. High heritability (bs) estimates were obtained for most of the characters except number of pods per shoot, number of pods per kilogram and per cent of shell. Genetic advance (GA) was high for the character of number of pods per tree.

**Key words** : Genetic variability, Tamarind genotypes

## **. Effect of Various Levels of Nitrogen on Growth and Flowering Characters of Different Varieties of Chrysanthemum**

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#### **ABSTRACT**

Investigation was carried out to evaluate the performance of different varieties under varying levels of nitrogen. Variety Flirt with 200 kg N ha<sup>-1</sup> gave superior performance in all vegetative and yield parameters like plant height, number of branches per plant, number of flower per plant, flower yield per plant and hectare basis compared to other varieties. Early flower emergence was observed in variety IHR-6 with 200 kg N ha<sup>-1</sup>.

**Key words** : Chrysanthemum, Growth , Nitrogen, Yield Parameters.

## **Effect of Plastic Films on Shelf-life of Okra (*Abelmoschus esculentus* L.)**

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#### **ABSTRACT**

Okra fruits were prepacked in polyethylene 200 gauge (P<sub>1</sub>), polyethylene 150 gauge (P<sub>2</sub>) and polypropylene 100 gauge (PP) with 0% (V<sub>0</sub>), 1% (V<sub>1</sub>) and 2% (V<sub>2</sub>) perforation or ventilation and then shelf-life was studied in ambient condition (25.4°C to 33.3°C temperature and relative humidity of 78 to 80%). It was found that P<sub>1</sub> (polyethylene, 200 gauge) was superior over P<sub>2</sub> (polyethylene, 150 gauge) and PP (Polypropylene, 100 gauge) for the different post harvest characters i.e. physiological loss in weight (PLW), shrinkage, blackening and sensory quality during storage at ambient condition. Non-perforated packages (V<sub>0</sub>) in general maintained the quality for longer period and increased shelf-life compared to perforated packages (V<sub>1</sub> and V<sub>2</sub>). The effect of P<sub>1</sub>V<sub>0</sub> treatment (Polyethylene 200 gauge □ 0% perforation) was best because of low PLW, shrinkage, blackening and maintained better sensory score upto 12 days of storage. This was followed by P<sub>2</sub>V<sub>0</sub> (Polyethylene 150 gauge □ 0% perforation) and PPV<sub>0</sub> (Polypropylene 100 gauge □ 0% perforation) treatment.

**Key words** : Okra, Perforation, Polyethylene, Polypropylene, Shelf-life.

## **Computer Aided Design of an Indirect Type UHT Heat Exchanger**

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### ABSTRACT

Ultra High Temperature (UHT) sterilization process involving indirect type heating has an advantage of simplicity in design and operation. Indirect type of equipment usually consists of either plate heat exchangers or tubular heat exchangers used for different stages of sterilization process. Tubular heating systems are advantageous than plate heating systems as a fouling layer on the heated surface has much less proportional effect on the area available for the product flow. Tubular systems can withstand a higher internal product pressures because of the absence of gaskets. This paper describes the computer aided design procedure for a tubular indirect type UHT heat exchanger for heating milk to sterilizing temperature. The unit consists of a triple tube heat exchanger (TTHE) with three concentric tubes having inner diameters 12.5, 22.5, 28.0 mm and outer diameters 15.0, 25.5, 31.0 mm respectively. The iterative computer aided design procedure gave an optimum length of 2.4 m for the TTHE with a milk processing capacity of 7.9 litres/ min. The overall heat transfer coefficients based on outside area of inner tube and inside area of middle tube for the TTHE were found to be 2564 and 2700 w/m<sup>2</sup> k respectively. The milk side heat transfer coefficient was found to be 4630 w/m<sup>2</sup> k.

**Key words** : Design, Heat Exchanger, Sterilization.

## Costs and returns on Different Size Groups of Paddy Farms in Guntur District of Andhra Pradesh

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### ABSTRACT

Break-up cost of cultivation in *kharif* season is Rs.21878.72, Rs.23,845 and Rs.22,774 per hectare on small, large and average farms respectively. In *rabi* season, Rs.25,176, Rs.26,548 and Rs.25,789 on small, large and average farms observed respectively. The net income to the farmers in *kharif* season is less when compared to *rabi* season. Except for family labour income in *rabi* season, other farm business measures are more on large farms than small farms in both seasons.

**Key words** : Paddy farms

## Knowledge of Cotton Farmers on Health Hazards of Pesticides in Kurnool District of Andhra Pradesh - An Analysis

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### ABSTRACT

Majority of the cotton farmers were having medium knowledge on hazards of pesticides. Farmers are spraying pesticides indiscriminately, which are hazardous to their health. Education, extension participation, extension contact are positively & significantly correlated with Knowledge on pesticide hazards. This indicated that as rise in educational levels increased their ability to grasp facts, analyze and interpret the negative effects of indiscriminate pesticide use. The data also revealed that increase in extension participation, and extension contact helped in better gain of knowledge on pesticide hazards.

**Key words** : Correlation, Cotton, Knowledge, Pesticide hazards.

## Correlates of Change in Attitude of Dairy Farm Women Due to Training Programme

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### ABSTRACT

A study was conducted in Chittoor district of Andhra Pradesh with an objective to identify the correlates of change in attitude of dairy farmwomen due to training programmes. The experimental design "One group before and after" was adopted. The study revealed that about 15% improvement in the level of attitude of dairy farmwomen towards scientific dairy farming was due to training. The study established the relationship between economic motion and attitude towards dairy farming; which could serve the policy makers and extension workers as guidelines for promoting dairy farming in other parts of the Country.

**Key words :** Dairy Farm

## Performance of Frontline Demonstrations on Sesame in Tribal Areas of Vizianagaram District in Andhra Pradesh

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### ABSTRACT

Frontline demonstrations were conducted in 44ha area from 1999 to 2004 in 106 farmers' field as demonstration units on both the varieties. On an average the variety YLM-11 has performed well and given an average yield of 6.30 quintals/ ha and YLM-17 produced an average yield of 5.56 quintal/ ha. The percentage increase in the demonstration plots over local check was 60.30 and 45.55 in YLM-11 and YLM-17 respectively. The extension gap in case of YLM-11 was 2.37q/ha and 1.74q/ha in case of YLM-17. The technology index is 21% to the variety YLM-11 and 20% to YLM-17 which shows the good performance of these varieties in tribal areas of the Vizianagaram district in Andhra Pradesh.

**Key words :** Extension gap, FLD, HYV, Sesamum.

## Marketing, Storage-Processing and Cultural Maladies, Remedies as Perceived by the Coconut Farmers

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### ABSTRACT

Lack of remunerative prices, middle men exploitation, lack of processing and inadequate storage facilities, affection towards traditional seed were the major maladies, establishing government institution to purchase coconut, construction of storage godowns and building credibility on the improved seed were the highest ranked remedies obtained in the study conducted with a diagnostic design in East Godavari district over a proportionately drawn sample of 120 coconut farmers. The chi-square test of maladies and remedies were significant at 0.01 level of probability.

**Key words :** Coconut cultivation, Malady, Remedy.

## Research Note

### Genetic Variability in $F_2$ and $F_3$ of Bitter Gourd

P Sumarani, K Arya, Dijee Bastian, G Gayathri and Vidhu Francis Palathingal

### Correlation Studies In Cashew (*Anacardium occidentale* L.)

Achamma Oommen, M Bindu, K Arya, Dijee Bastian, G Gayathri  
And Vidhu Francis Palathingal

### Efficacy of KN 128 (Indoxacarb 15 EC) against Rice Leaf Folder (*Cnaphalocrosis medinalis*) on Paddy

D Sridevi

**Assesment of Chlorophyll Content using  
Chlorophyll meter in Chickpea**

V Jayalakshmi, T Yellamanda Reddy, G Appa Rao and T Giridhar Krishna

**Pineapple Production in Nagaland – A Regression Approach**

D S Dhakre and Amod Sharma

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