

Effect of Zinc Management on Yield, Nutrient Uptake and Economics of Kabuli Chickpea (*Cicer kabulicem* L)

P Damadara Ramaprasad, Ch Pulla Rao and K Srinivasulu
Department of Agronomy, Agricultural College, Bapatla 522 101, Andhra Pradesh

ABSTRACT

A field experiment was conducted on clay loam soil in farmer's field of Cheluvanuppalapadu village, Nagulappalapadu Mandal, Prakasam (Dt.), Andhra Pradesh during *rabi* 2007-08 to study the effect of soil and foliar application of Zinc sulphate on seed yield nutrient uptake and economics of kabuli chickpea (Cv LBeG-7). The highest yield was recorded with the application of 25 Kg ZnSO₄ ha⁻¹ in combination with 0.5% ZnSO₄ spray twice at 45 DAS and 55DAS. Higher dose of Zinc (37.5Kg ZnSO₄/ha⁻¹) showed a decline trend in seed yield. The uptake of N, P and Zn was significantly influenced by soil application of zinc upto 25 kg ZnSO₄ ha⁻¹ at maturity. The maximum uptake of N, P, K and Zn was recorded by 0.5% ZnSO₄ spray twice (at 45 and 55DAS) at maturity. Application of 25Kg ZnSO₄ ha⁻¹ through soil in combination with 0.5% ZnSO₄ foliar spray twice (at 45 and 55 DAS) recorded highest B:C ratio 1: 2.98 and net returns (Rs. 59,037 per hectare).

Key words : Economics, Kabuli chickpea, Nutrient Uptake, Yield.

Effect of Integrated Nutrient Management Practices on Growth and Yield of Maize under Rainfed Condition

U K Hulihalli and S P Dineshkumar
Department of Agronomy, Agricultural College, U A S, Dharwad 580 005, Karnataka

ABSTRACT

A field experiment was conducted to evaluate the integrated use of organic and inorganic source of nutrient on growth, yield and yield parameters of hybrid maize during *kharif* season 2009 at Main Agricultural Research Station, Dharwad (Northern transition Zone) of Karnataka. The results of the study revealed that application of enriched FYM @ 7.5 t ha⁻¹ recorded significantly higher grain yield, harvest index and dry matter accumulation at harvest and was on par with FYM @ 7.5 t ha⁻¹, vermicompost @ 2.5 t ha⁻¹ and poultry manure @ 1.0 t ha⁻¹. Organic manures application did not influence significantly on stover yield, 1000 grain weight, number of grains per cob, number of rows per cob, number of grains per row, cob diameter, cob length and cob weight of maize. Significantly higher stover yield, number of grain per row, cob weight, dry matter accumulation at 60 DAS and at harvest were noticed with application of 150% RDF. Poultry manure @ 1.0 t ha⁻¹ with 150% RDF application recorded significantly higher number of grains per row and harvest index. Application of FYM @ 7.5 t ha⁻¹ with 150% RDF and enriched FYM @ 7.5 t ha⁻¹ with 150% RDF recorded significantly higher cob weight and stover yield, respectively.

Key words : Inorganic, Integrated nutrient management, Maize, Organic, Rainfed.

Response of Rice (*Oryza sativa* L.) to Top Dressing of Phosphorus Through Complex Fertilizers

M Srujana, K Mosha, G Subbaiah and P Prasuna Rani
Department of Agronomy, Agricultural College, Bapatla 522 101, Andhra Pradesh

ABSTRACT

A field experiment was conducted to study the effect of top dressing of phosphorus through complex fertilizers on rice during *kharif* 2009 on clayey soil at Agricultural College Farm, Bapatla. The experiment consisted of nine treatments *viz.*, application of 60 kg P₂O₅ ha⁻¹ as basal through SSP (T₁), DAP (T₂) and 20:20:0 (T₃), two equal splits (½ as basal + ½ at maximum tillering stage) through DAP (T₄) and 20:20:0 (T₅), two equal splits (½ as basal + ½ at Panicle initiation (PI) stage) through DAP (T₆) and 20:20:0 (T₇), three equal splits (1/3 as basal + 1/3 at maximum tillering + 1/3 at PI stages) through DAP (T₈) and 20:20:0 (T₉). The results revealed that there was a significant increase in effective tillers m⁻², filled grains panicle⁻¹, grain yield and phosphorus uptake with two splits of P₂O₅ half as basal and half at maximum tillering stage either through DAP or 20:20:0. No significant variation was recorded with regard to growth, total grains panicle⁻¹ and test weight due to sources of P at different times of application.

Key Words: Complex fertilizers, Rice, Top dressing.

Response of Sunflower (*Helianthus annuus* L.) to the Foliar Fertilization of Micronutrients under no Till Condition in Rice Fallows

M Malla Reddy, B Padmaja, R Uma Reddy and D Vishnu Vardhan Reddy
Regional Agricultural Research Station, Warangal 506 007, Andhra Pradesh

ABSTRACT

A field experiment was conducted at Regional Agricultural Research Station, Warangal to find out the response of sunflower to the foliar spraying of micronutrients under zero tillage in rice fallows during *rabi* 2007-08 and 2008-09 on clay loam soil. The results revealed that combined foliar spraying of ZnSO₄, FeSO₄, Biozinc and Borax along with the recommended NPK significantly improved the yield attributes and seed yield of sunflower (1262 and 1100 kg ha⁻¹ respectively) over recommended NPK alone (828 and 780 kg ha⁻¹ respectively), during 2007-08 and 2008-09. When sprayed individually, Biozinc or Borax only could influence the yields of sunflower than other micronutrients *i.e.*, ZnSO₄ or FeSO₄. Approximately, the seed yield of sunflower was increased by 47% by combined foliar spraying of ZnSO₄, FeSO₄, Biozinc and Borax twice at 30 and 50 days after sowing with an improvement of Rs. 8378/- and 5710/- ha⁻¹, respectively in net returns over recommended NPK alone.

Key words : Biozinc and Borax, FeSO₄, No till condition (zero tillage), Sunflower.

Evaluation of Post Emergence Herbicides Alone and in Combination with Imazethapyr on Weed Control in Rice Fallow Blackgram

A S Rao

Integrated Weed Management Unit, Regional Agricultural Research Station, Lam, Guntur 522 034

ABSTRACT

A field experiment was conducted during rabi 2002-03 at Agricultural college Farm, Bapatla to evaluate the bioefficacy of different post emergence herbicides like imazethapyr (63 and 31g ha⁻¹), fenoxaprop ethyl (56 and 28g ha⁻¹) and cyhalofop butyl (100 and 50 g ha⁻¹) alone and as tank mixtures with imazethapyr on weed control in rice fallow blackgram in a randomized block design with three replications. Results indicated that all the weed control treatments significantly reduced the weed dry weight and recorded higher seed yield and yield attributes over weedy check. Among the treatments, alone application of fenoxaprop ethyl 56g/ha recorded the highest seed yield (725 kg ha⁻¹), net returns (Rs.7,125 ha⁻¹) and B:C ratio of 0.65 and was on par with cyhalofopbutyl 100 g ha⁻¹ (653kg ha⁻¹) and treatment combinations involving higher dose of these herbicides. Tank mixing of imazethapyr with grassy herbicides like fenoxaprop ethyl and cyhalofop butyl offer no additional advantage. Further higher dose of imazethapyr 63g ha⁻¹ caused slight injury to crop but the injury symptoms vanished in a week. The unchecked weed growth through out the crop growth period caused 55 percent reduction seed yield compared to fenoxaprop ethyl 56g ha⁻¹.

Key words : Imazethapyr, Post emergence herbicides, Rice fallow blackgram.

Effect of Agro-techniques on Yield, Yield Attributes and Phosphorus Uptake of Maize (*Zea mays* L.) in Mining Soil Reserve Phosphorus

T S Gahukar, R Veeraraghavaiah, Ch Pulla Rao and G V Lakshmi

Department of Agronomy, Agricultural College, Bapatla 522 101, Andhra Pradesh

ABSTRACT

A field experiment was conducted during the *rabi* 2009-10 to study the effect of certain agro-techniques to mine soil reserve phosphorus by cultivation of maize (*Zea mays* L.). The results of the experiment revealed that yield attributes, yield and phosphorus uptake were significantly influenced by organic/inorganic treatments, inoculation treatment and their interactions. Among different treatment combinations studied, application of FYM and PSB together showed significantly the highest yield attributes, yield and phosphorus uptake of maize over other treatment combinations studied.

Key words : Agro-techniques, FYM, Maize, P uptake, PSB, VAM, Yield

Growth, Yield, Nutrient Availability and Uptake of Chickpea (*Cicer Arietinum L.*) as Influenced by Varieties and Phosphorus Levels

R Srinivasa Rao, A Pratap Kumar Reddy and V Sailaja

Department of Agronomy, College of Agriculture, Rajendranagar, Hyderabad
500 030, India

ABSTRACT

A field experiment was conducted during the *rabi* 2009-10 comprising of three varieties (Annigeri, JG-11 and KAK-2) and four levels of phosphorus (0, 25, 50 and 75 kg P₂O₅ ha⁻¹) with factorial randomized block design concept. The results indicated that significantly higher dry matter production, phosphorus availability and N, P, and K uptake by KAK – 2 variety. The maximum dry matter, P availability as well as N, P, and K uptake were recorded with the application of 50 kg P₂O₅ ha⁻¹. Increasing the levels of phosphorus 75 kg P₂O₅ ha⁻¹ did not show any benefit on chickpea growth and yield attributes.

Key words : Dry matter, Nutrient availability and uptake, Phosphorus levels.

Genetic Variability and Character Association Studies in Introgressed lines of *Gossypium hirsutum*

N Chamundeswari and J S V Samba Murthy

Regional Agricultural Research Station, Lam, Guntur

ABSTRACT

Eighty two introgressed lines along with two checks were evaluated for yield and its component traits. Wide range of genotypic coefficient of variation and phenotypic coefficient of variation, high heritability accompanied by high genetic advance were observed for number of bolls per plant, seed cotton yield per plant and number of monopodia revealing the role of additive gene action. The phenotypic and genotypic correlations revealed significant and positive correlation of number of bolls per plant with seed cotton yield. Path analysis further confirmed this relationship. It clearly indicated that boll number is amenable to selection. However care should be taken in boll weight and boll number since they are negatively correlated with each other *vis a vis* boll weight is positively correlated with important fibre characters.

Key words : *Gossypium hirsutum*, Introgression, Variability.

Character Association and Path Coefficient Analysis in Baby Corn (*Zea mays* L.)

J Arvind Kumar, K Murali Krishna, K Radhika and R Sai Kumar
Department of Genetics and Plant Breeding, College of Agriculture,
Rajendranagar, Hyderabad

ABSTRACT

One hundred selected baby corn genotypes were studied for character association and path coefficient analysis for yield and twelve yield characters. Significant positive association of baby corn yield with the characters viz., days to 50% tasselling, days to 50% silking, plant height, number of shoots per plant, shoot weight with husk, shoot weight without husk, shoot length, shoot girth and number of pickings was observed. In the study of partition of correlation coefficients into direct and indirect effects through path coefficient analysis, days to 50% tasselling, plant height, shoot weight with husk and shoot length showed positive direct effect on baby corn yields.

Key words : Baby corn, Character association and Path analysis.

Genetic Diversity in Chickpea (*Cicer arietinum* L.)

V Jayalakshmi, G Rufus Ronald and C Kiran Kumar Reddy
Regional Agricultural Research Station, Nandyal 518 502, Andhra Pradesh

ABSTRACT

One hundred and twenty nine genotypes of chickpea were assessed for genetic diversity utilizing ten physiological and yield attributes through Mahalanobis D^2 statistic. The genotypes were grouped into 11 clusters with D^2 values ranging between 9.69 and 23.56. Cluster I was the largest containing 54 genotypes followed by clusters II (25), VII (18), VI (14), III (12) and the remaining six clusters were one genotype each. The highest inter cluster distance was observed between clusters IX and XI followed by clusters V and VII and clusters V and IX. The maximum per cent contribution towards divergence was made by harvest index (45%) followed by number of pods (37.88%) and 100 seed weight (20.24%). Based on *per se* performance, genetic diversity and cluster means, genotypes ICCV 1083, ICCV 5135, ICCV 15264, ICCV 12028, ICCV 7308, ICCV 12328 and ICCV 5879 may be chosen for crossing programme for chickpea improvement.

Key words : Chickpea, Cluster Distance, Cluster Means, D^2 analysis, Genetic Divergence.

Comparison of Different Stability Parameters in Italian Millet

G Usha Kiran, C Panduranga Rao, J S V Samba Murthy, V Srinivasa Rao
and M Lal Ahamad

Department of Genetics and Plant Breeding, Agricultural College, Bapatla 522 101, A P

ABSTRACT

The study of different stability parameters in twenty genotypes of Italian millet over 16 environments indicated that stability parameters like Wricke's (1962) ecovalence, mean variance due to genotype-environment interaction of Plaisted and Peterson (1959) and variance or information of ranks over environments gave similar results to that of the deviation from regression (S^2d) of Eberhart and Russell (1966) and Shukla's stability variance whose calculation is cumbersome. All these methods indicated more stable genotypes GS 480 and GS 489 for productive tillers plant⁻¹; GS 487 and GS 444 for ear length; GS 440 and GS 477 for ear weight; SRL for 1000 grain weight; GS 479 and GS 487 (for straw yield) GS 450 and GS 467 for grain yield plant⁻¹ over environments.

Key words : Italian millet, Stability.

Genetic Estimates, Association and Path Co-efficient Analysis in Blackgram (*Vigna mungo*.(L.)Hepper)

D Kodanda Rami Reddy, O Venkateswarlu, M C Obaiah and G L Siva Jyothi
Agricultural Research Station, Podalakur , Nellore District, Andhra Pradesh

ABSTRACT

Forty one divergent genotypes of blackgram (*Vigna mungo*.(L) Hepper) were evaluated for the yield and yield attributes during *rabi*, 2009-10. Genotypes differed significantly for all the characters studied. Plant height, number of clusters plant⁻¹, number of pods plant⁻¹, pod length and seed yield plant⁻¹ expressed high genetic advance as percentage of mean (GAM) coupled with high to moderate heritability and genotypic coefficient of Variation, indicating there by the preponderance of additive gene action for these characters. Correlation analysis indicated that seed yield /plant was significantly associated with number of branches plant⁻¹, number of pods plant⁻¹, pod length and number of seeds/pod. Path co-efficient analysis revealed that plant height, number of branches plant⁻¹, number of pods plant⁻¹, pod length, number of seeds pod⁻¹ and 100-seed weight had positive direct effects on seed yield plant⁻¹. Hence, selection on these traits could be suggested to bring improvement on seed yield in blackgram.

Key words : Blackgram, Character Association, Genetic Variability, Path Analysis.

Correlation and Path Analysis of Yield and Quality Attributes in Rice

P Siva Parvathi, V Satyanarayana Rao, Lal Ahamed M and P Anil Kumar
Department of Genetics and Plant Breeding, Agricultural College, Bapatla 522 101, A P

ABSTRACT

Eighty four genotypes of rice were evaluated for twenty two yield and quality attributes to assess correlation among themselves. The correlation analysis indicated that grain yield was significantly associated with plant height, total number of tillers per plant, ear bearing tillers per plant, panicle length, days to 50% flowering, filled grains per panicle and grain length. Path coefficient analysis revealed that total number of tillers per plant, ear bearing tillers per plant, filled grains per panicle, grain width, test weight, kernal length and head rice recovery percentage had positive direct effect on grain yield. Hence, selection on these traits suggested to bring simultaneous improvement of yield and quality.

Key words : Correlation, Path Analysis, Quality, Rice, Yield

Reproductive Biology of Lotus

J S Minimol and K T Presannakumari

Department of Plant breeding and Genetics, College of Horticulture
Kerala Agricultural University, Thrissur, Kerala, India

ABSTRACT

Sacred lotus (*Nelumbo nucifera* Gaertn.) is a plant, where its all parts are used in one way or other in various ayurvedic preparations. A thorough knowledge of floral biology was studied which will help in further crop improvement. Flower of lotus is complete. An additional whorl called transitional petal was observed in all accession except Bramangalam, which was aborted stamen. The process of anthesis in sacred lotus completed in three days. Lotus flowers are with fertile stamen and stigma but 100 per cent cross pollinated due to self incompatibility. Pollen grains were round, triporate and yellow in colour with reticulate sculpturing on the exine.

Key words :Cantharophilous, Protogyny, Transitional petals, Triporate pollen

Identification of Elite Genotypes of Blackgram (*Vigna Mungo* (L.) Hepper)

Amit Kumar Malviya, G Roopa Lavanya, Anshu Singh and V Priyadarshini

Department of Genetics and Plant Breeding, Allahabad School of Agriculture, Sam Higginbottom
Institute of Agriculture, Technology and Sciences, Allahabad-211007, Uttar Pradesh, India

ABSTRACT

Field experiment was conducted to study variability and genetic diversity among 32 blackgram genotypes for selection of elite genotypes suited to Allahabad. Analysis of variance indicated the presence of substantial genetic variability among genotypes. Higher magnitude of phenotypic coefficient of variation (PCV) was recorded for harvest index followed by number of pods per plant and biological yield. High genotypic coefficient of variation (GCV) was recorded for harvest index, number of pods per plant and biological yield. High heritability coupled with high genetic advance as per cent of mean was recorded for number of pods per plant, biological yield, harvest index and number of clusters per plant. Thirty two genotypes were grouped into six clusters, indicating a wide range of variation among the genotypes studied. The cluster IV was the largest consisting of 11 genotypes, followed by cluster I and cluster III with nine and four genotypes respectively, while cluster II and IV with three genotypes each. Inter cluster distance (D^2) was found maximum between cluster III and V (6045.625). Hybridization between the desirable genotypes from these divergent clusters *i.e.*, cluster III and V may produce transgressive segregants in blackgram.

Key words : Elite genotypes, Genetic advance, Genetic diversity, Genetic variability, Heritability.

Correlation and Path Coefficient Analysis in F₃ Generation of Rice (*Oryza sativa* L.)

**J N V V Manohar Krishna, M Lal Ahamed, B Vijaya Lakshmi, K V Seetha Ramaiah
and G L N Reddy**

Department of Genetics and Plant Breeding, Agricultural College, Bapatla 522 101, Andhra Pradesh

ABSTRACT

Correlation and path coefficient analysis were computed to assess the association for yield, yield contributing characters and physico-chemical quality characteristics in sixteen F₃ population of rice. The results of phenotypic and genotypic correlation analysis revealed that plant height, productive tillers per plant, panicle length, kernel breadth and elongation ratio were significantly and positively correlated with grain yield per plant. Path analysis indicated that plant height, productive tillers per plant and panicle length had high direct positive effect on grain yield per plant signifying the importance of these traits in improvement of grain yield per plant.

Key words : Correlation, Path analysis, Rice.

Effect of Organic Manures on Soil properties in Saline Soil with Sub-Surface Drainage System

S Balaji Nayak, V Sankara Rao and P Prasuna Rani

Department of Soil Science and Agricultural Chemistry, Agricultural College, Bapatla 522 101

ABSTRACT

A field experiment was carried out during kharif, 2005 to study the effect of different organic manures (FYM, poultry manure, pressmud, green manure (Dhaincha) and green leaf manure (*Calotropis* sp)) on Salinity, bulk density, hydraulic conductivity, dehydrogenase activity and nutrient availability in saline soil with sub-surface drainage system, using rice (var: BPT 1768) as test crop. The experiment was laid out in randomized block design (RBD) with four replications. The results showed that addition of organic manures did not influence soil pH. However, E_c decreased with the addition of FYM, green leaf manure and green manure. Organic carbon content increased with the addition of organic manures. Addition of organic manures decreased the bulk density and increased the hydraulic conductivity of soils. Dehydrogenase activity was high due to the addition of FYM followed by green leaf manure, green manure, pressmud and poultry manure. Availability of nitrogen, phosphorus, potassium and DTPA extractable zinc, iron, manganese and copper increased with the application of organic manures following the order: FYM, green leaf manure, green manure, pressmud and poultry manure treatments, except available phosphorus, which was high in poultry manure treatment.

Key words : Organic manures, Rice, Saline soils.

Field Reaction of Certain Pigeonpea (*Cajanus cajan* (L.) Millsp.) Genotypes to Gram Pod borer, *Helicoverpa armigera* (Hubner)

S Malathi and S Vanisree

Regional Agricultural Research Station, Warangal-506 007, Andhra Pradesh

ABSTRACT

Eight medium duration pigeonpea genotypes were screened for three years during *kharif* season of 2003, 2004 and 2005, to evaluate for their field reaction against *Helicoverpa armigera* (Hubner) at Agricultural Research Station, Warangal, Andhra Pradesh. Observations on mean oviposition, larval infestation and per cent pod damage due to *H. armigera* over three years were computed. The entry VRG-1 recorded significantly lowest oviposition (2.69 eggs plant⁻¹) followed by WRG-27 (5.15 eggs plant⁻¹), LRG-41 (5.67 eggs plant⁻¹). Significantly lowest larval load was found in VRG-1(1.31 larvae plant⁻¹), WRG-27 (1.45 larvae plant⁻¹) followed by LRG-41 (1.87 larvae plant⁻¹). Least pod damage of 7.80% was found in the entry LRG-41. The entries LRG-41, WRG-55 and WRG-27 gave higher yields of 2382, 2246 and 1808 kg ha⁻¹ respectively and were superior to the check entries ICPL-332, ICPL-84060 and ICP-8863.

Key words : *Helicoverpa armigera*, Pigeonpea, Screening

Studies on Growth Analysis and Grain Yield in Rice under SRI Cultivation

G Rama Rao* and K Balakrishana Reddy

Department of Plant Physiology, S V Agricultural College Tirupathi 517 502, A P

ABSTRACT

Two field experiments were conducted during *kharif* seasons of 2007 and 2008 at wetland farm of S.V.Agricultural College Tirupathi to analyze the growth and grain yield in rice under SRI cultivation. The results revealed that significant differences were observed among the varieties and age of seedlings with regard to growth parameters and grain yield at all stages of plant growth. Maximum CGR, RGR, NAR, LAD, SLW and grain yield was produced by SRI -8 days followed by SRI-12 days and least in conventional method -21 days. Among the varieties tested, BPT5204 recorded higher CGR, RGR, NAR, LAD, SLW and grain yield followed by DRRH-2, NLR-145 and BPT3291 .The interaction between varieties and age of seedling was significant.

Key words : Crop growth rate, Grain yield, Growth analysis, Net assimilation rate, System of rice intensification

Fruit Quality and Shelf Life of Banana Cv. Grand Naine Influenced by Chelated and Non Chelated Micronutrients

M K Yadav, N L Patel, Ankita Hazarika and Parmveer Singh
Navsari Agricultural University, Dandi Marg, Navsari (India) 396 450

ABSTRACT

Field experiment was conducted at Regional Horticultural Research Station, Navsari Agricultural University, Navsari during the year 2005 to study the effect of micronutrients on fruit quality and shelf life of banana (*Musa paradisiaca* L.) Cv. Grand Naine. The experiment was laid out in randomized block design with nine treatment combinations involving two levels of FeEDTA and FeSO₄ (25g and 50g per plant) and ZnEDTA and ZnSO₄ (20g and 40g per plant) with common application of MnSO₄, CuSO₄, and Borax (20, 5, 10g per plant respectively) except control. The treatments were replicated thrice. The higher level of chelated zinc produced favorable effect on fruit quality in terms of TSS per cent, total sugars, reducing sugars, sugar / acid ratio and acidity per cent. This treatment also increased the shelf life of banana fruit.

Key words : Banana, FeEDTA, Micronutrients, ZnEDTA

Design and Fabrication of Semi Circular Contraction Critical Flow Flumes for Low Discharges

K Krupavathi, T V Satyanarayana and H V Hema Kumar
College of Agriculture Engineering, Bapatla 522 101, Andhra Pradesh

ABSTRACT

The concept of circular flume with traditional cutthroat flume is used in the present study to minimize error in the discharge measurement with the traditional cut throat flume. The flume models were tested at College of Agricultural Engineering and developed discharge measurement equations for the flow range of 3-20 lps under free flow and submerged conditions. The results indicated that the semicircular contraction critical flow flumes can be used for discharge measurement in open channels with best accuracy of $\pm 5\%$ with equations developed. A single measurement of Brink depth in the flumes can be used for discharge computation in open channels. The semi circular contraction flumes can be used with $\pm 10\%$ upto 80% submergence conditions. The flumes are portable, easy to fabricate, transport and install in open channels. As the fabrication cost of the flume is less (Rs. 2250.00 to Rs. 3050.00), these flumes can be recommended to the farmers for use in field channels for increasing water application efficiency under canal system.

Key words : Brink depth, Critical depth, Semi circular contracted flume, Submergence condition

Economic Analysis and Production Constraints of Rice Fallow Maize in Guntur District of Andhra Pradesh

H Srinivasa Rao, G Raghunadha Reddy, D V S Rao and V Srinivasa Rao
Department of Agricultural Economics, Agricultural College, Bapatla 522
101

ABSTRACT

Maize, the queen of the coarse cereals, cultivation has been steadily increasing in many parts of Andhra Pradesh, particularly as a rice fallow crop. The study reveals that human labour cost followed by fertilizers and irrigation are the major cost in maize production. The farm income measures proved that the medium and large farms are more viable than small farms. The Kendall's coefficient showed that high cost of fertilizers and pesticides, non-availability of credit in time and the forced sales for debt payment were the major constraints.

Key words : Constraints, Cost-return profile, Maize.

Forecasting of Prices of Sunflower and Groundnut in Andhra Pradesh-An Application of ARIMA Model

I Bhavani Devi , P Raghu Ram , T Lavanya and Vandana Suman
Department of Agricultural Economics, S V Agricultural College, Tirupati-517 502

ABSTRACT

ARIMA Model was used to forecast sunflower and groundnut prices in Kurnool market for the period from January 2010 to May 2010 from the modal prices of 13 years. Forecasts were found fairly accurate when compared with real time prices.

Key words : ARIMA, Forecasting, Real time prices

Knowledge at Adoption Level of Paddy Farmers on Integrated Pest Management Practices in West Godavari dist

O Sarada and G V Suneel Kumar
Krishi Vigyan Kendra, Undi – 534 199

ABSTRACT

The study was conducted in West Godavari District of Andhra Pradesh during the year 2008-09 to know the level of knowledge and adoption of Integrated Pest Management (IPM) practices by paddy farmers. Fifty six per cent of the paddy farmers possessed medium overall knowledge level and the remaining paddy farmers were almost equally possessed high (22.50%) and low (21.25%) knowledge levels regarding IPM practices of paddy. Similarly, more than half of the paddy farmers (57.50%) had medium adoption level of recommended IPM practices followed by low (22.50%) and high (20.00%) adoption. Further it was also observed that knowledge exhibited positive and significant relationship with adoption level of paddy farmers on IPM practices of paddy.

Key words : Adoption, IPM, Knowledge, Paddy

Internet Services Utilization - An Appraisal

P B Pradeep Kumar, G Sivanarayana and K Dhanasree

Department of Extension Education,, S.V.Agricultural College, Tripuati 517 502

ABSTRACT

A study was conducted in Agricultural college, Bapatla to explore the extent of utilization of Internet services by the students. Majority of the students used internet services such as search engine, www, e-mail, gopher, willfer and chatting.

Key words : Internet, services.

A Scale to Measure the Attitude of Teachers towards Information Communication Technologies (ICTs)

V Jyothi , V Ananda Rao and B Vijayabhinandana

Department of Agricultural Extension, Agricultural College, Naira, ANGRAU, A.P

ABSTRACT

A scale was developed to measure the attitude of teachers towards ICTs based on Likert's method of summated rating. A tentative list of 67 statements each expressing the attitude of teachers towards ICTs was collected and edited in the light of the informal criteria suggested by Thrustone and Chave, Likert and Edward. These statements were framed such that they expressed the positive or negative attitude. The respondents were asked to indicate their degree of agreement or disagreement with each statement on a five point continuum ranging from strongly agree to strongly disagree. The score of each individual item on the scale was calculated by summing up the weights of the individual items. On the basis of the total score, the respondents were arranged in descending order. The top 25 per cent of the respondents with their total scores were considered as the high group and the bottom 25 per cent as the low group, so that these two groups provide criterion groups to evaluate individual items. In order to find out the discriminating index for each item, 't' value was calculated using the formula and procedure given by Edwards . The scale so developed finally consisted of 24 statements (14 positive and 10 negative).

Key words : Attitude, Continuum, ICT, Reliability, Validity.

Correlation Matrix Between Temperature, Growth And Yield Of BN Hybrid During rabi Season

Kailash Chand Verma, K B Suneetha Devi, A P K Reddy

Department of Agronomy, College of Agriculture, Rajendranagar, ANGRAU, Hyderabad-500030

ABSTRACT

Field experiment was conducted to study the seasonal influence (mean and minimum) on growth, yield and quality characters of BN hybrid at Achrya NG Ranga Agricultural University Hyderabad. The mean and minimum temperatures of 19.6, 20.9 °C and 10.7 and 12.1 °C were reported during I and II cut period. Negative correlation was found significant at 0.01 level between number of leaves clump⁻¹ and mean and minimum temperature thereby causing significant reduction in green and dry fodder yield of BN hybrid. It is also established that plant height and number of tillers clump⁻¹ had significant positive correlation with green and dry fodder yield of BN hybrid.

Key words : Bajara napier hybrid, Correlation, Mean, Minimum temperature, Seasonal variation

Genetic Parameter Studies for Yield and Quality Traits in Blackgram

G Kishore Kumar, K H P Reddy, D M Reddy P Sudhakar

Department of Genetic and Plant Breeding, S V Agricultural College, Tirupati 517 502 A P

Key words : Blackgram, Genetic advance, Heritability.

Studies on Accelerated Ageing in Sunflower (Morden) Seeds Produced at Different Provenances

K Bayyapu Reddy

Agricultural Research Station, Jangamaheswarapuram, Gurazala, Guntur 522 415
Andhra Pradesh

Key words : Accelerate ageing, Germination, Sunflower.

Effect of Pre sowing Seed Treatments on Seed Quality Parameters on Carryover Seed of Soybean

N K Gayathri and G E Ch Vidyasagari

Regional Sugarcane, Rice Research Station, Rudrur, Nizamabad

Key words : Pre sowing, Seed treatments, Soybean.

Indigenous Animal Husbandry Practices in Guntur District of Andhra Pradesh

G Siva Narayana, M Leela Vani and V K Dubey

Department of Extension Education, Agricultural College, Bapatla 522 101 A P

Key words : Animal Husbandry, Indigenous Practices.

Profile of the National Rural Employment Guarantee Scheme (NREGS) Beneficiaries in Thane district of Maharashtra

Shivaji Dadabhau Argade, T Gopi Krishna, B Vijayabhinandana, V Srinivasa Rao

Department of Extension Education, Agricultural College, Bapatla 522 101 A P

Key words : Employment, NREGS, NREGS beneficiaries, Profile, Rural.

Demographic Characteristics of Opinion Leaders and Their Followers in Non Progressive and progressive Villages

K Rama Krishna and D M Chandargi

Department of Extension Education, University of Agricultural Sciences, Dharwad

Key words : Employment, NREGS, NREGS beneficiaries, Profile, Rural.