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**COMPENDIUM OF  
ABSTRACTS**



Sponsors



were conducted for tribals/ST farmers under TSP (KSHAMTA) project on wheat variety "Raj-4120" in 48.0 ha area for 95 beneficiaries/ST farmers of Jhansi district. The demonstrations were conducted in 2 villages-Garhmanu and Badora of Badagaon and Bahina block of Jhansi district, respectively with majority of tribal population. Among input, 40 kg seed of improved wheat variety Raj 4120/acre were given in 2.0 clusters for 95 beneficiaries under FLD. Wheat variety Raj-4120 was released in 2008 by RARI, Durgapur, Jaipur having average yield potential of 47.0 q/ha with maturity period of 119 days, resistant to stem rust. Sowing of crop in different clusters was done during first fortnight of November, 2019 by tribals/ST farmers while harvesting was done from last week of March to first week of April, 2020. Recommended package and practices were adopted by tribals/ST farmers as and when needed. Findings revealed that the demonstrated variety recorded grain yield of 34.0 q/ha as compared to check (25.0 q/ha) resulting in 36.0% higher seed yield. The mean values of economic parameters i.e. gross cost (Rs. 24350/ha), gross return (Rs. 65450/ha), net return (Rs. 41100/ha) and B:C ratio (1:2.68) were observed in demo plot.

**Keywords:** Performance, Wheat, Yield, FLD

ISEE/2021/ABS/86

### Okra: A great potential for export to enhance the income for farmers of Bundelkhand region of Uttar Pradesh

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#### ABSTRACT

Okra (*Abelmoschus esculentus* L. Moench) commonly known as ladies'finger or bhindi is cultivated in tropical and subtropical regions around the world. Okra has high nutritional value and grows quickly with high temperature, which lends its production to more tropical parts of the world. It can be successfully cultivated during both summer and rainy season in Bundelkhand region of Uttar Pradesh, but the major constrain of low productivity of okra in the Bundelkhand is due to lack of awareness for newly released okra cultivars along with non-adoption of recommended package of practices. To replace this old age technology a trial was conducted at Vegetable Research Farm, BUAT, Banda with ten okra hybrids along with one local cultivar. The present investigation was laid out in Randomized Block Design with three replications during summer & rainy season-2020. Characters studied regarding growth attributes were plant height (cm) while regarding to yield attributes were days to 50% flowering, days to first fruit harvest, fruit length (cm), fruit diameter (cm), number of fruits per plant and average fruit weight (g). Among the ten varieties viz. Arka Nikita, Bhindi No. 10, Super lady, Ankur-41, Avantika Gold, Venus Plus, Chinese Jhar, Mona-002, NBH-180, Bhindi NS-862, variety Bhindi No. 10 proved its dominance over other varieties regarding to both attributes (growth and yield) while among agronomical practices was found best and optimum for okra crop. Maximum fruit yield 125 q/ha was recorded in Bhindi No. 10 followed by Bhindi NS 862 (119.75 q/ha), Super lady (118.45 q/ha). Days to 50% flowering was earliest in Bhindi No. 10 (50.40 days). Fruit length was maximum in Bhindi No. 10 (13.50 cm) with number of fruits per plant (17.30) followed by Bhindi NS 862. Hence on the basis of mean yield performance varieties Bhindi No. 10, Bhindi NS 862 and Super lady can be suggested for cultivation in Bundelkhand region of Uttar Pradesh to enhance the income of small, marginal and big farmers.

**Keywords:** Okra, Hybrids, Performance

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### Socio - Economic Traits of Mango Growers Lucknow District of Uttar Pradesh

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#### ABSTRACT

The present study was conducted in Lucknow District of Uttar Pradesh. 120 farmers were included in the sample for the present investigation. Results reveals that majority of respondents were found in majority of the respondents (46.66 per cent) were observed in the middle age category of up to 41-60 years. So, the majority of the respondents (Farmers) fall in the category of age group up to 41 -60 years. That is majority of respondents found under the married Category (80.33 per cent) followed by unmarried category (13.33 per cent) and other specific (05.83 per cent). It revealed that the fact is majority of respondents (66.66 per cent) belongs Joint family system. Thus, it is concluded that the majority of the respondents was found in category of large family size. The average income was observed to Rs. 138,000 with a range of minimum Rs. 38000 and maximum Rs. 750,000. It is evident that majority of the respondents (36.66 per cent) were having participation in more than two organization. That most of the respondents were found with medium (60 per cent) degree of scientific orientation followed by High (28.33 per cent) degree and then lastly Low (11.66 per cent) degree of scientific orientation. That is out of 16 variables studied. The Six variables are Attitude, Adoption, Social participation, Caste, Education; Extension contact has highly significant and Positive-correlation. Size of family and Age are two variables which is Highly Significant and negative correlation with knowledge. Type of Family, Risk orientation, Economic Motivation, Scientific orientation are non significant and the correlation is negative with Knowledge. Annual Income is single variable which correlated with Knowledge which is non significant and positive correlation with knowledge. Type of Family, Risk orientation, Economic Motivation, Scientific orientation are non significant and the correlation is negative with Knowledge. Most of the being suggestions being made in view of the expressed opinion of the respondents, observation of the investigator, it may be said protection of crop should be ensured from animals and farmers training programme for commercial farming should be organized and emphasis must be given to popularize and make more awareness about production of mango.

**Keywords:** Socio - Economic Traits, Mango Growers

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### Assessment of Farmers' Perception towards Crop Residue Burning in Haryana

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#### ABSTRACT

Crop residue burning (CRB) is a recurring problem in India, especially in the northwestern regions of Punjab, Haryana, and western Uttar Pradesh. It imposes an adverse impact on the environment, human life, and agricultural productivity. Mechanization, labor shortage, short interval between rice harvesting & sowing of wheat forced the farmers to burn the crop residues for its disposal. The present study assesses the perception of the farmers on CRB. A total of 180 farmers from three purposively selected districts, namely Karnal, Kurukshetra, and Fatehabad from Haryana, were chosen to generate data. Stratified random sampling was employed in the selection of blocks, villages, and respondents. For measuring farmers' perception, a scale was constructed using Likert's method of summated ratings. The split-half technique was used for testing the reliability (0.91) and empirical type of validity determination was used to calculate the scale's validity (0.89) of the scale. The study reveals that farmers perceived CRB as an economical and viable option (89.33% mean score); hence, it was considered efficient straw management practice. Most farmers (85.89%) did not perceive the happy seeder as feasible since it needs a high horsepower tractor. Farmers perceived that CRB negatively affects the plant, soil, air, and human health. Farmers' perception was positively and significantly correlated with education, operational land holding, and annual income ( $P < 0.05$ ). Hence, there is a need for feasible and sustainable alternatives applicable in their farming situation. Community-based approaches like custom hiring centres, bio-mass-

based power plants, mushroom cultivation, etc., can be promoted for sustainable crop residue management through extension and advisory services. It will lead to adopting alternative crop residue management options and mitigate residue burning in the long run.

**Keywords:** Crop residue burning, Farmers, Perception

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## Evaluation of different germplasm of African Marigold (*Tagetes erecta* L.) for phenotypic performance and floral yield under the Bundelkhand condition

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### ABSTRACT

The present study was conducted to evaluate the performance of six genotypes of African marigold (*Tagetes erecta* L.) for phenotypic performance and floral yield under Bundelkhand region (Banda, Uttar Pradesh). The experiment was layout in Randomized block design (RBD) with three replications at Instructional Farm of Department of Floriculture and Landscape Architecture, College of Horticulture, Banda during the 2019-2020. With recommended cultural practices were adapted for raise the crops for successful. Observation Plant height, plant spread, No of primary branches per plant, No of secondary branches per plant, days to first bud appearance, days taken to first flowering, days to 50% flowering, flower diameter, flower weight, duration of flowering, shelf life of flower peduncle length of flower (mm), No of flower per plant flower yield per plant (g), flower yield per plot (kg) and flower yield (t/ha) were recorded and statistically analyzed. All of the genotypes showed significant variation in growth, flowering and yield parameters. The maximum plant height and maximum secondary branches per plant were found in Pusa Basanti Gainda. Maximum plant spread, maximum number of primary branches per plant, maximum flower diameter and highest peduncle length were recorded in NS-104. Earliest first flower bud appearance, fifty percent flowering, minimum days to first flowering and maximum number of flowers per plant were found in variety Pusa Narangi Gainda. Maximum flower weight per plant, longest duration of flowering, longest shelf life, maximum flower yield per plant, maximum flower yield per plot, maximum flower yield per hectare, maximum gross return and net return were recorded in Bidhan Marigold-2.

**Keywords:** Marigold, Parameter, Flower, Yield

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## Adoption of Innovative Nagli Production Technology by the farmers for their Livelihood Support

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### ABSTRACT

Millets are small grained cereals, referred as "Poor man's cereals". These hardy cereals are grown where other cereals failed to yield satisfactorily due to unfavorable agro-climatic conditions. As small millets are highly nutritious now called as nutri millets even superior to rice and wheat in certain constituents like calcium, iron etc. The study was undertaken in Kolhapur district of Maharashtra State during the year 2016-17. Four tahasils namely Panhala, Karveer, Radhanagari and Shahuwadi were selected purposively for the study having good area under Nagali crop. On the basis of the highest area, 3 villages from each tahasil were selected. 10 Nagali growing farmers were selected on the basis of highest area for interview from the selected villages. Thus, in all 120 farmers were finally selected for the study. According to the objectives of the study, the data was collected by using personal interview technique with the help of structured interview schedule in Marathi language. Most of the respondents had knowledge about the Nagali cultivation practices like type of soil and pre-cultivation (100.00 per cent), sowing distance with seed drill (93.33 per cent), seed rate (90.83 per cent), threshing and harvesting (100.00 per cent) and yields (88.33 per cent). In case of chemical seed treatment (15.84 per cent), organic

seed treatment (3.33 per cent), crop protection from heliothis (13.33 per cent) and spraying of Zyneh against the control of blast disease (32.50 per cent) the respondents had little knowledge. Majority of the respondents had completely adopted the Nagali cultivation practices in respect of soil (92.50 per cent), Pre-cultivation like plowing and harrowing (88.33 per cent), weeding (100.00 per cent) and harvesting and threshing (100.00 per cent). A very few respondents had completely adopted the Nagali cultivation practices like application of FYM (5.00 per cent), chemical seed treatment (2.50 per cent). In case of plant protection, the adoption is very low i.e. control of aphids, leaf and grain cutting larvae (7.50 per cent), control of heliothis (1.66 per cent) and spraying of Zyneh against blast disease (7.50 per cent).

**Keywords:** Adoption, Innovative Nagli Production Technology, Farmers, Livelihood, Support

ISEE/2021/ABS/100

## Information Seeking and Sharing Behaviour of the Farmers around KVK Chhata, Prayagraj-II

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### ABSTRACT

The study was conducted in four villages nearby KVK Chhata, Prayagraj-II covering 120 farmers selected randomly in Baharia block of Prayagraj district. The results revealed that socio-economic profile of respondents was found to be medium level. The information sources sought by respondents were expert of the KVK, input agencies, agricultural magazine, information brochure, TV and Progressive farmers. Information sought by the respondents were shared by the respondents with fellow farmers, neighbors etc. However, some difficulties in translation of information on the field were non availability of certified seed, proper and timely guidance by the experts as well as poor infrastructure facilities. The concern authorities should look in to the matter.

**Keywords:** Socio-economic profile, Respondents, Progressive farmers

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## Influence of foliar application of various micronutrients on growth, yield and quality attributes of cabbage (*Brassica oleracea* var. *capitata* L.)

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### ABSTRACT

The present investigation entitled "Influence of foliar application of various micronutrients on growth, yield and quality attributes of cabbage (*Brassica oleracea* var. *capitata* L.)" was conducted during the winter season of 2017-18 and 2018-19 at the Vegetable Research Farm (South Block), Department of Horticulture, Institute of Agricultural Sciences, BHU, Varanasi, Uttar Pradesh. The field experiment was laid out in randomized block design with replicated three times. The present investigation comprised foliar application of sixteen micronutrient treatments of different dosages. However, a similar application of Zn 0.5 g l<sup>-1</sup> was also applied in all the treatments. Foliar spray of micronutrients was applied three times at 15, 30 and 45 DAT. Among the different micronutrient treatments, application of (T13) B-20 @ 0.075% + Mo @ 0.45% was proved effective treatment in attaining ultimate plant height, plant spread, number of wrapped leaves, days to first head initiation and 50 per cent head maturity, polar diameter, equatorial diameter, head volume, average head weight, head yield, head firmness, chlorophyll content, total soluble solids, vitamin - A & C content and improving shelf life of cabbage during both the season of cabbage cultivation. However, the same treatment also favours minimum number of