



DIRECTOR OF RESEARCH
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Research Recommendations released during 2017 - 2018
(Approved by Joint Agresco - 2018)


The Jt. Agresco-2018 held at Dr.Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli during May 24-26,2018. The Jt. Agresco has approved 31 recommendations of our university as given below

1.Crop Improvement

| SrNo. | Name of crop | Variety | Important features | Photo |
|-------------------------|--------------|--------------------------------|---|--|
| D) Field Crops : | | | | |
| 1. | Paddy | SYE-503-78-34-2 (Tilak) | <ul style="list-style-type: none"> ➤ Duration : 50% flowering 110-112 days with 140-145 Days to seed Maturity (Late Duration) ➤ Fine grain type (Short Slender) having– Test weight – 12.02-13.0 g ➤ Good cooking quality and intermediate Amylose content (22.26 %), high milling (70.40 %) and head Recovery (58.5 %) ➤ Moderately resistant to Stem borer and Plant Hopper. ➤ Moderate reaction to neck blast |  |





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| 2 | Soybean | AMS-1001 (PDKV Yellow Gold) | <ul style="list-style-type: none"> • In MVT AMS 1001 has shown 24.17 % and 20.58 % increase seed yield over state check MAUS-71 and JS-335 respectively. • In SMVT it has shown 36.01%, 30.58 % and 33.82% increase seed yield over JS-335,JS-97-52 and MAUS-71 respectively. • In AICRP trial AMS-1001 has shown an increase in seed yield by 46.71 % over JS 95-60, 38.29 % over JS 93-05 and 12.91 % over JS-335. • Resistant to root rot/Charcoal rot and Yellow mosaic virus in natural field condition. • Moderate resistant to Girdle beetle and Stem fly . • Medium maturity duration (97 days) • Pod shattering resistance up to 10 days from harvest maturity. • Excellent Fatty acid profile. • Trypsin inhibitor content is comparatively less (35.79%) |  |
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II) Flower Crop :


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| 3. | Gladiolus | AKGL-04-16 (PDKV GOLD) | <p>Long straight spikes (103.5 cm)</p> <p>2) More number of florets (16.51)</p> <p>3) Attractive pinkish yellow petals with red splash</p> <p>4) Ability to produce more corms and cormels</p> <p>5) More Vase life (10.25 days)</p> <p>6) Resistant to <i>fusarium</i> wilt ✓</p> |  |
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| c) New Farm Impliment/Machinery | | | |
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| Sr.No. | Name of Impliments | Features | Photo |
| 1 | PDKV small tractor operated seed ferti drill cum interrow cultivator | PDKV small tractor (18.5 - 25 hp) operated seed ferti drill cum interrow cultivator is recommended for sowing and intercultural operation |   |
| 2 | PDKV small tractor operated crop residue disintegrator | PDKV small tractor (18.5 -25 hp) operated crop residue disintegrator is recommended for <i>in-situ</i> crop residues management |   |
| 3 | . PDKV developed power cutter | Dr. PDKV developed power cutter is recommended to use for cutting sugar cane sets and forage. |  |
| 4 | PDKV Rotary Onion Grader | It is recommended to use PDKV Rotary Onion Grader (Capacity- 20 TPD) for size grading of onions |   |
| 5 | PDKV Jamun pulp extraction machine | PDKV Jamun pulp extraction machine is recommended for the extraction of jamun pulp. |   |


Production Technology


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| 1 | For getting higher seed yield and economic returns in soybean, foliar application of 2% 19:19:19 (NPK water soluble fertilizer) at pod initiation stage is recommended. |  |
| 2 | It is recommended that, Sowing of Kharif sorghum on four row 1.5 m. BBF at 45 cm by tractor is recommended for getting maximum yield, net returns and improved moisture conservation |  |
| 3 | For obtaining higher grain yield and net monetary returns from drill rice in Eastern Vidarbha Zone of Maharashtra, sowing of drill rice at row spacing of 20 cm and plant to plant distance at 10 – 15 cm is recommended |  |
| 4 | Under rainfed condition, to reduce the subsoil compaction due to use of rotavator, and to improve the moisture retention and other soil physical properties; and also for obtaining higher crop yield, it is recommended to use deep ploughing once in three years and use rotavator every years. |  |

Weed Management




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| 5 | It is recommended that the post emergence application of Imazethapyr + Imazomox70WG 0.070 kg a i /ha (100 g/ha) POE 20 DAS was the most remunerative and effective herbicide for controlling the weed flora and getting higher yield and economic returns in groundnut |  |
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SSAC

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| 6 | The integrated application of 2.5 tones of FarmYardManure + 1.25 tones of Gypsum 15-20 DAS in Tied Broad Bed Furrow is recommended for improvement in soil properties , yield and monetary returns of soybean in deep black sodic soils of Purna valley of Vidrabha |  |
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| 7 | <p>In deep black soil, for obtaining higher grain, protein yield and monetary return of pigeonpea as well improving fertility status of soil, application of recommended dose of 25 kg N and 50 kg P₂O₅ along with 30 kg K₂O and 20 kg S per hectare is recommended</p> |  |
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Horticulture

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| 8 | <p>It is recommended to apply 187.5:112.5:150 kg NPK/ha for obtaining higher and better quality yield of capsicum under 50 per cent green shade net house conditions. Out of 112.5 kg phosphorus, 84.50 kg should be applied through single super phosphate by soil application whereas, 187.5:28:150 kg NPK/ha should be applied through urea, phosphoric acid and muriate of potash in twenty equal split doses once in a week through fertigation</p> |  |
| 9 | <p>Banana variety Grand Naine (G-9) is recommended under Vidarbha region for successful cultivation, best quality and maximum yield returns</p> |  |
| 10 | <p>It is recommended for successful propagation of pomegranate through air layering the media combination of sphagnum moss and vermicompost 1:1 WV is effective for better success, survival and higher monetary return</p> |  |


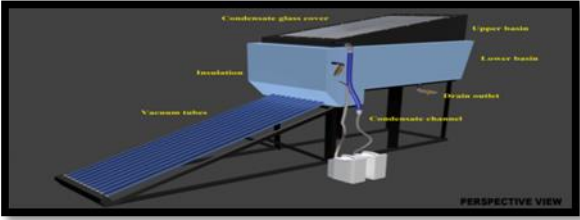
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| 11 | For higher success of grafting in custard apple, ten months old rootstock during January to March is recommended |  |
| 12 | It is recommended that for obtaining maximum flower yield and economic benefit from <i>Jasminum sambac</i> plants, it is recommended to prune the plants during fourth week of December and with medium pruning level(30 cm. Height from soil). | |






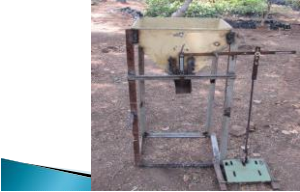
Plant Protection

Entomology


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| 13 | For effective management of pulse beetle it is recommended to keep 80 tablets (weighing 0.5 g each) per quintal in stored mungbean |  |
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Agril.Engg.

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| 14 | The PDKV process for preparation of smooth textured jam from beetroot ,that includes preparation of pulp by pressure cooking and grinding, adding it with sugar, lemon juice and preservative and heating for 30 to 40 minutes is recommended | |
| 15 | PDKV developed Hydroponic structure made by U-PVC pipe with dimension of(3x 2x 3 m)is recommended for green fodder crops. (Gupta) | |
| 16 | It is recommended to use Dr. PDKV solar insect light trap in IPM practice for attracting insects on the field |  |
| 17 | It is recommended to use Dr. PDKV double basin solar distillation system integrated with vacuum tubes to enhance thermal efficiency and maximize distillate yield |  |

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| 18 | PDKV SPV knapsack cum hand operated sprayers is recommended for spraying on various crops |  |
| 19 | It is recommended to use drip irrigation at 80% evapotranspiration replenishment with polyethylene mulch (silver color and 50 micron thickness) for highest growth and yield of chilli crop |  |
| 20 | It is recommended to use drip irrigation at 80 % Etc with black polyethylene mulch during winter season for highest growth and yield of Bitter Gourd crop. |   |
| 21 | For obtaining higher yield and superior quality of Nagpur mandarin fruits with more economics returns, water soluble fertilizer should be applied through fertigation with dose of 1020- 340- 510 NPK(g/plant) in six splits |  |
| 22 | PDKV Soil bag machine is recommended for the filling of soil in the nursery polybags | <p data-bbox="954 1205 1310 1227">Soil bag filling machine for nursery</p>  |

Social Science

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| 23 | Amravati Division in Vidharbha region 81.80 per cent farmer are not have information about “How to prepare spray solution”. So it is to recommend that this information about “How to prepare spray solution” should be given to the farmers of Vidharbha region. (Through, Extension wing of agriculture department, Electronic media etc |  |
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