Research Highlights

Varieties Released

Five varieties of vegetable crops have been released by State Varietal Release Committee.

VL Hybrid Shimla Mirch 1

A capsicum variety VL Hybrid Shimla Mirch 1 has been found suitable for organic, inorganic and polyhouse conditions. It gave 23.8 and 40.5 per cent higher yield (134.9 q/ha) than hybrid check varieties DARLH 201 (109.0 q/ha) and Bharat (96.0 q/ha), respectively.

VL Tamatar 5

Open pollinated variety of tomato VL Tamatar 5 has been found suitable both for open and protected cultivation during summer and rainy season. The variety has given 12.3 per cent higher yield (175.9 q/ha) than check variety Pant Tamatar 3 (156.3 q/ha).

VL Hybrid Tamatar 1

A tomato variety VL Tamatar 1 has been found suitable for organic, inorganic and polyhouse conditions. It has given 28.0 per cent higher yield (226.4 q/ha) than check variety DARLH 304 (176.9 q/ha).

VL Cherry Tamatar 1

Open pollinated variety VL Cherry Tamatar 1 has been found suitable both for open field and protected cultivation. The fruits of this variety are small having attractive red colour with oval shape; better

VL Shimla Mirch 3

Open pollinated variety of capsicum VL Shimla Mirch 3 has been found suitable for organic and inorganic conditions during summer and rainy season. The fruits are uniform, attractive, dark green, medium size, squared (60-70), with 3-4 stripes and
shinning surface. The March crop yields 250-320 q/ha. The variety is also suitable for growing under polyhouse conditions.

**Variety Identified**

**VL Madua 347**

An early maturing (100 days) variety of finger millet **VL Mandua 347** (VR 708/ VL 149) has been identified for release in Bihar, Gujrat, Jharkhand, Karnataka, Madhya Pradesh and Uttarakhand. In these states, VL 347 gave average yield of 22.51 q/ha, which is 11.4 per cent higher than the check variety VR 708 (20.2 q/ha). It has shown resistance to blast.

**VLFB 415: French bean genotype resistant to rust**

French bean rust, caused by *Uromyces appendiculatus* is a major disease of North western hills. Field experiment was conducted in 2011 with a susceptible variety VL Bean 2 and Contender. Urediniospores were inoculated twice by using direct spore rubbing method after 8-10 days of seeding when primary leaves were one-half fully expanded. Disease severity was measured 15-20 days after inoculation and VLFB-415 genotype showed high resistance to rust disease.

<table>
<thead>
<tr>
<th>Year</th>
<th>Disease Severity (%)</th>
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<tr>
<td></td>
<td>VLFB 415</td>
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<tr>
<td>2011</td>
<td>04.0</td>
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**New Garden Pea Genotypes Developed**

Four genotypes of garden pea were developed and selected for different important traits and found suitable under mid hill conditions.

**VP 745:** High shelling >60% (very thin pod skin)

**VP 1017:** High yielding with high shelling >60% Maturity: Medium; TSS: 22-24%

**VP 1153:** Dwarf plant type (short internode) Plant height: 42 cm Maturity: Early High shelling percent: >60%

**VP 1001:** Three pods per cluster At least 2-3 such cluster (3 pods) per branch and rest of the cluster are normal

**Other Activities**

- The 88th foundation day of the institute was celebrated on Jul. 4. On the occasion, Dr. J.C. Bhatt, Director presenting the achievements of past one year, emphasized on the need for diversification of hill agriculture to attain prosperity. *Susheeri Radha Bhatt*, Chairperson, Gandhi Peace Foundation, New Delhi and *Sarva Seva Sangh*, Wardha (Maharastra) graced the occasion as the Chief Guest. She expressed deep concern over the migration of rural youth to seek employment elsewhere. To stop the migration, there is need to make the hill agriculture profitable, sustainable and compatible with environment. Chairman of the function, Swami Somadevanand of Ramkrishna Mission, Almora threw light on the life of Swami Vivekananda and appreciated the institute for following his thoughts. On the occasion, meritorious children of institute staff were honored. Retired institute personnel, dignitaries from other institute/departments, farmers and families of the staff also attended the celebration which ended with traditional mango feast.

- A Biodiversity and Environment Day was celebrated at Experimental Farm, Hawalbagh on Jul. 18. The saplings of *Quercus leucotrichophora* and *Quercus glauoides* were planted on the degraded sloping land. Besides, the institute has initiated a campaign for removal of *Parthenium hysterophorus* at
technology. Mr B S Bisht, DDM, NABARD, congratulated Vivekananda Kisan Club, Deenagri gooth, for receiving State Level Best Farmers’ Club Award. Scientists of the institute provided training on protected cultivation of vegetables, pest management, management of soil fertility and animal care etc. District Horticulture Officer, Almora, informed the farmers about various horticulture related schemes of government for farmers. The program was attended by more than 50 farmers.

- ‘Rabi Kisan Mela’ was organized at Experimental Farm, Hawalbagh on Sept. 24. Dr. M.M. Kimothi, Director, Uttarakhand Space Application Centre, Dehradun, was the chief guest of the function. Dr. Kimothi and the dignitaries visited the farm and appreciated the technologies developed by the institute. Twenty five exhibition cum sale stalls were put by the line departments, institutes and NGOs. More than 1000 farmers participated in Mela. Farmers from distant localities including the tribal areas participated in the event. A farmers-scientists interaction meet was also organized.

- Arhar Diwas/ Kisan Mela was organized at Naghat village of District Bageshwar on Oct. 8. A seed meeting was held on Oct. 9 involving the NSC officials.

- The meeting of Research Advisory Committee of VPKAS was held during Oct. 15-16, under the Chairmanship of Dr. B. Mishra, Vice Chancellor, SKUAS & T, Jammu.

- The meeting of Institute Management Committee was held on Oct. 17.

- The meeting of Institute Research Council (IRC) was held on Oct. 20-21, to review the progress of research work undertaken during rabi 2010-11 and to finalize programme for ensuing rabi 2011-12.

- Brain Storming Session sponsored by Uttarakhand Council of Science and Technology under USSTC 2011 on “Hill Agriculture: Tryst with Challenges and beyond” was organized on Nov. 14. Dr. Mangla Rai, Agricultural Advisor to the Chief Minister, Govt. of Bihar and Former Secretary, DARE & DG, ICAR presided over the session. Dr. H.S. Gupta, Director, IARI, New

- A Kisan Diwas was organized at village Bhagatola for the farmers of Jageshwar area on Jul. 30. Inaugurating the program and appreciating the efforts of the farmers towards vegetable production, Dr. J.C. Bhatt, Director, stressed on the need of farmer-to-farmer dissemination of agricultural
Delhi delivered the key lecture. Vice Chancellors of Agricultural Universities, Directors of the different Agricultural Research Institutes from north-western Himalayas, scientists of VPKAS, Almora, students and farmers participated in the brainstorming meet.

- Eight training programmes were conducted on Oct. 8, 17-19, 22-24, Nov. 5-9, 23, 26-28, Dec. 12-16, 29-31, for 227 farmers of hill region.
- Workshop on Exploring Partnership on Nov. 30.

- Quarterly meeting of Hindi Rajbhasha Karyavayan Samiti on Dec. 28.

New Colleagues
- Ms. Shephali Amrapali, Scientist (Econ. Botany) Sep. 5.
- Mr. Raghv B.R., Scientist (Pl. Breeding) Sept. 5.


Retirement
- Mr. M.M. Joshi, AAO, Nov. 30.

Promotion
- Mr. Shambhu Dutt Bisht, Asstt. to AAO, Dec. 1.

Transfer
- Mr. Deepak Rai, SMS to IISR KVK on Aug. 20.
- Mr. M.C. Pathak, Asstt. to IVRI, Bareilly Aug. 25.
- Dr. Ranjan Bhattacharyya, Scientist to IARI, New Delhi Jul. 8.

Activities of Krishi Vigyan Kendras

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<th>Activities</th>
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<tr>
<td>Trainings</td>
<td>39 (876 trainees)</td>
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<tr>
<td>FLDs</td>
<td>3.11 ha (756 beneficiaries)</td>
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<tr>
<td>KVK, Bageshwar</td>
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<tr>
<td>Trainings</td>
<td>22 (442 trainees)</td>
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<tr>
<td>FLDs</td>
<td>35.6 ha (No. of Demonstrations - 1220)</td>
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From Director's Desk

The VPKAS Newsletter Vol. 15 No. 2 is in your hand. This institute under the ages of ICAR has been engaged in agricultural research for fulfilling the needs of farmers of north-western Himalayas with the mission of enhancing productivity and ecological sustainability of hill agriculture through niche-based diversification. During last six months, five varieties of vegetable crops (2 in tomato, 2 in capsicum and 1 in cherry tomato) have been released by State Varietal Release Committee. Keeping in view the importance and nutritive value of Finger millet, the institute has developed a variety VL Mandua 347, which has been identified by SVRC for Uttarkhand and other states of India.

(J.C. Bhatt)