



A Quarterly Newsletter of Nepal Agricultural Research Council (NARC)

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January- June, 2011

Twentieth NARC Commemoration Day Observed

On the auspicious occasion of its twentieth annual anniversary Nepal Agricultural Research Council (NARC) celebrated a day long programme with various functions at headquarter premise Singh Durbar Plaza, Kathmandu on May 8, 2011.



Honorable Minister Mr. Hari Narayan Yadav inaugurating 20th NARC commemoration day

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National Winter Crops Workshop

The 28th National Winter Crops Research Workshop was organized by Nepal Agricultural Research Council (NARC) at Regional Agricultural Research Station, Lumle Kaski from 9-10 March, 2011 (25-26 Phalgun, 2067). The two day workshop was held with the objective to review the research activities on winter crops that were carried out during last two years, discuss and explore the mitigation measures of the problems encountered while implementing the research projects and to recommend technologies for release and pipeline. The workshop was inaugurated by the Chief guest Ms. Durga Shob, Honorary Member of Constitutional Assembly from Kaski district, representing UNCP (Maoist). In her inaugural speech Ms. Shob stressed the need of proper utilization of public resources/funds in favours of rural poor for uplifting their living standard



Participants of National Winter Crops Workshop, Lumle, Kaski

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from pithy condition to a minimum livelihood maintenance level. The workshop was attended by 100 participants from various Commodity programs, R/ARs, Divisions of NARC including Regional Director of Western Development Region, DoA. In the Workshop, 60 research papers and 5 coordinators/status reports were presented from various participating scientists/technical officers and respective coordinators. The papers were presented in two separate groups i.e. Plant breeding and genetics; and Agronomy and Resource management, plant protection and socio-economics. The recommendations/output upon discussion with respective group, has come up as follows:

1. Recommendation

Wheat

Hills (701 to 1600 masl) for Normal/Irrigated condition:

Propose to release: BL 3235; BL 3503 (by 2011)

Salient Features: Earliness, Bold Grain, High Yield, Yellow Rust Resistant

Cropping pattern: Maize or Rice - Wheat

Pipeline - NL 1064 (Damphe 1), Damphe 2, Becard 1 (NL 1054), Munal (NL 1055)

Hills: Rainfed

Pipelines - Chonte, Chonte 1, Kiskadee 1, Chewink 1, Chyakhura 1,

Salient features: UG 99 and yellow rust resistant,

Cropping pattern: Rice or Maize or Millet or summer legumes - wheat

Terai (Below 700 meter)

Pipelines: NL 1073 (UG 99 resistant), BL 3623 (resistant to spot blotch and LR, high yield, wider adaptability),

Cropping pattern: Rice - Wheat

High hills:

Pipeline – WK 1902, WK 936, WK 1481

Cropping pattern: Potato – Wheat, Fallow - wheat, legumes - wheat

Other technologies for promotion

- WK1182, BL3235, BL3503 for early, yellow rust resistance
- NL 1064 (Danphe) for yellow rust and UG 99 resistance
- NL 1073 for yellow rust resistance
- Permanent raised bed planting with 4 t/ha mulch (wheat straw for rice and mungbean and rice straw for wheat) for sustainable tillage and crop establishment for irrigated terai condition

- 150 kg/ha Nitrogen application has been found effective for higher yield
- Application of potassic fertilizers (K₂O) @60 kg/ha found effective in Chitwan condition
- Two sprays of Tilt (Propiconazole) @1.5ml/liter of water at 15 days interval is effective for spot blotch disease control
- The prototypes of power tiller attachments like bed planter and power tiller, zero till seed drill perform better for small farmers and needs fabrications for large scales adoption
- Use of nitrification inhibitors (Neem oil and Ammonium sulphate) should be encouraged to reduce carbon emission
- Yellow rust patho-type monitoring should be assisted by station pathologist
- Phosphatic fertilizer has no effect on foliar blight disease of wheat
- Eleven *Cochliobolus sativus* isolates from Nepal varied greatly in morphological characteristics and virulence on 7 wheat genotypes
- Wheat genotypes X fungal isolates interaction was significant indicating possibilities of race specificity
- Beyond December 5 is late for wheat sowing under Bhairahawa condition
- Zero tillage and reduced tillage with power tiller seed drill and rotary tiller have been found economic for wheat cultivation.
- Surface seeding of wheat is suitable for lower wet land and excess soil moisture condition for crop establishment
- *C. sativus* from plains are more virulent than the isolates from hills of Nepal
- Chirya-7 wheat genotypes has been found significant to all isolates of *C. sativus* and can be used as differential
- Yellow rust patho-type monitoring should be assessed by trained pathologist

Grain legumes

Lentil: ILL 7723 (To be Proposed by 2011) for mid and far Western Terai

Pipeline (Terai and Inner Terai):

ILL 7164 (wilt and stemphylium blight tolerant), ILL 6467 (high yield), ILL 7163 (wider adaptability), RL-4 (earliness and bold seeded)

Chickpea: KPG 59 (to be proposed for release by 2011) for all over Terai

Salient features: Botrytis gray mold tolerant, high yield,

Pipeline – KPG 173-4 (pod borer tolerant, high yield), ICCX 840508-44 (high yield and BGM tolerant) and ICCV 97207 (high yield and BGM tolerant)

Lentil and Chickpea

- Multiple disease resistance (Stemphylium and wilt/ root rot) lentil genotypes ILL 7164
- Promising resistance lines for wilt of lentil ILL7715, ILL9993 and PL 406
- Chickpea wilt resistance lines- ICCV 03107, ICCV 03213, ICCV 04105 and KPG 59

Rajma

- White mold tolerant genotypes PDR 14 and Ambar
- Foliar spraying of Carbendazim 50 WP and Benomyl 50 WP @ 2gm/liter of water at an interval of 10-15 days beginning from late flowering
- Early planting (Aswin 3 to 4th weeks) in Chitwan, Makwanpur and Nawalparasi
- 120:60:40 NPK kg/ha has been recommended

Oilseed crops

Variety to be proposed for release by 2011

Tori: Morang Tori (early, high yielding, wider adaptation)

Rayo: ICJ 9704 (early, high yielding, wider adaptation)

Pipeline:

Tori: Acc# 9109, Acc# 9118 (high yield, Alternaria blight tolerant)

Rayo: Divya (early, high yield, Alternaria blight tolerant)

Other technologies

- *Trichoderma sps* has found be used as a bio-control agent for soil borne disease in legumes and oilseed and will be supplied by Plant Pathology division
- Alternaria leaf spot controlled by application of *T. viridae* treated FYM @ 10mt/ha
- Rapeseed genotypes tolerant to Alternaria blight: ICT-2001-4, ICT-2001-8, ICT-2001-9, ICT-2001-35, ICT-2001-38, ICT-2002-9, ICT-2002-11, ICT-2002-16 and ICT-2002-17
- Mustard genotypes tolerant to Alternaria blight: ICJ-9708, T-59, RL-1359, Rohini, Rajat, Bio-902, Pusha Jaggnath

Barley:

Propose for release by 2011: X Veola-38 for Hills

Sugarcane:

Proposed: COSE 98231 (red rot tolerant, best for October planting (early), good for ratoon, good for upland and lowland irrigated condition, suitable for eastern to western region)

Pipeline: COSE 97232 (good for October planting (early),

UP 9742 (good for February planting)

CO 97182, BO 131 (good for rainfed condition)

UP 9530, BO 134 (good for February planting)

Cropping pattern: Early rice - sugarcane

- The ectoparasite *Epiricana melanoleuca* should be conserved and utilized for *Pyrilla* management.
- Pesticides Annonin, Karanjin, Azadirachtin are effective to suppress *Pyrilla* population has no adverse effect on *Epiricana melanoleuca*.
- Trash mulching (5cm thick), light earthing-up (45 and 60 DAP) and furrow application of Chlorpyrifos (1kg a.i. per ha) alone and in integration with each other are effective in suppression of shoot borer in Sugarcane, which should be tested in larger plot both on-farm and on-station.
- Effective and efficient screening facility for Red Rot in sugarcane should be developed and at least one manpower should be trained

2. Future strategies

National Wheat Research Program:

- Climate change mitigation through physiological research
- Linkage with biotechnology unit for double haploid production and MAS
- Perennial wheat development

Grain legumes:

- Research work on Drought tolerance and supplementary irrigation;
- Desi type and Kabuli type should be evaluated separately

Hill crops:

- Linkage establishment with brewery company for evaluating and development Malt Barley
- Evaluation and promotion of malting genotypes of barley in Terai areas

Oil seeds crops:

- Emphasis will be given to Mid hill for tori promotion;
- Emphasis will be given to Terai for rayo and tori
- Linkage with international organization for germplasm exchange, training, visit (immediate start and need support from NARC HQ)

Sugarcane:

- Formal/Official release/Registration of COSE 97231, which is already spread in Terai region/ domain (follow up urgently)

- Breeder and foundation seed should be multiplied at Jitpur only
- Sugarcane research should be focused only for irrigated and rainfed conditions

3. Problems

Wheat:

- Manpower (Wheat Physiologist)
- Lab equipment
- Field equipment

Grain legumes:

- Limited no. of legume breeders
- Lack of laboratory (plant protection and soil) facilities and specialized training
- Lack of genetic diversity in Phaseolus bean and lathyrus

Hill crops:

- Lack of technical manpower
- Seed drier

Oilseeds:

- Lack of scientific manpower (soil scientist and agronomist)

Sugarcane:

- No breeder
- Inadequate researchable land/field (Captured by Nepal Army)

4. Others recommendation

- Field gene bank should be established at all commodity programs/ARS/RARS as soon as possible
- NAGRC - National Agriculture Genetic Resources Center should immediately take up collaboration and coordination with national commodity programs and all research stations for collection and regeneration aspects
- Strengthen conservation and utilization of genetic resources of crops and animals
- Biotechnology unit should be upgraded as Center of Excellence
- Emphasis should be given to climate change mitigation research/technologies
- Biometrical/statistical training to newly appointed scientists/technical officers ASAPT (by the end of this fiscal year)
- Artificial Inoculation Facility should be created in all RARS and Commodity Programs (attn: PP Division)

5. Future Strategies

- Farm machinery manufacturing should be encouraged
- Government has to make policy for credit/loan on low interest rate and wave off custom duties on raw materials to the manufacturers
- Subsidies (40-60%) on machinery purchase by the farmers
- GoN should give due priority to agricultural mechanization research to promote agricultural mechanization to address the high production cost and labor scarcity, GoN policy on Ag. Mechanization must be improved
- Lentil genotype ILL 7164 to be pushed for release and can be used as donor for Stemphylium and wilt/rot resistance breeding
- Wilt/root rot resistance lines of chickpea and lentil should be promoted to yield trial and used as donors in crossing program
- Scale up of Rajma IDM technology in farmers field through large plot demonstration
- Biological management of white mold of Rajma using native species will be validated
- Create congenial artificial conditions for efficient and reliable disease screening
- An independent National Biological control research laboratories should be established to support IPM in various crops
- Emphasis should be given physiological research in the context of climate change
- Rate of returns to investment in wheat and legume research need to be examined
- CBSP approach should be promoted to complement seed supply system

6. Suggestion

- Training on 'Statistical tools and packages', proposal and scientific report writing for researchers
- Polyhouse construction at each R/ARS for screening germplasm
- Laboratory strengthening for quality research

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On the occasion a book in Nepali published by Agriculture Research Station, Pakhribas was released entitled “Disease free cardamom farming technology”. Several NARC staff were honored for their contribution in different activities of agricultural research. Mr Nand Kishore Roy of Fisheries Research Division emended plaque for this excellent contribution on fisheries research in Nepal. Similarly Ms. Gyanu Manandhar from Plant Pathology Division, Mr. Rajendra Darai from Regional Agriculture Research Station, Nepalgunj, Mr Sanjay Kafle from Asset Management Unit, Mrs. Asha Rayamajhi from Fisheries Research Division, Mr Paras Mani Mahat from ARS Bijayanagar, Jumla, Mr Bisheshwar Wagle, NGLRP, Rampur; Mr. Chandra Kant Mishra from Fodder and Pasture Research Division, Mr Dharm Raj Acharya from ARS, Pokhara, Mr. Krishna Kant Sharma from Wheat Research Program and Mr Tritha Man Maharjan from Agriculture Botany Division were awarded best performance award for their excellent work.

This year NARC had given recognition to the farmers for their support in adoption and dissemination of the research technology at community level. The recognition and plaque awarded to Mr. Gyan Bahadur Jalari of Kaski district for his contribution and promotion of cold water fish farming. Mr Sarf Lal Yadav from Bara district awarded for his contribution in promotion of rice technology and Mr. Chatur Man Man Tamang of Kavrepalanchok district awarded for the promotion and distribution of pasture technology to the other locality on the occasion Mr. Ram Prasad Sapkota of Rupatal Rehabilitation and Fisheries Cooperative for his excellent work in cold water fisheries promotion and net fish farming in the lakes. On the same occasion forty eight employee of NARC were given plaque with certificate for their continuous service of twenty five years in the government and NARC system.

The program was chaired by Secretary Mr Nathu Prasad Chaudary of Ministry of Agriculture and Cooperatives. Other special guest were JICA representative to Nepal Mr. Mitshuyoshi Kawasi and South Asian

representative of CIMMYT Dr G.O. Ferrara who were given thanks to NARC for celebration of 20th NARC Day and wished for the all success of NARC in the future endeavour.

Dr Ram Briksha Prasad, Director of Personal Administration, NARC given vote of thanks while Mr. Dinesh Pariyar, Executive Director of NARC gave highlights of achievements of past one year of agriculture research.

NARC has been established as an autonomous body of agricultural research under Government of Nepal in 1991 and since then it celebrates commemoration day on 8th May each year by organizing various activities.

In the occasion chief guest Honorable minister for agriculture and cooperatives and chairman of the council Mr. Hari Narayan Yadav inaugurated the function by lighting the Panas and said in his speech that agriculture is only the component by which the economic growth of the country can be enhanced through the holistic approach of agriculture development. Among which agriculture research is the major component and we should focus on it. He further said agriculture contributes 34% in the national economy whereas more than 65% of the people have the main source of livelihood. It is therefore the development of our country is impossible unless agriculture research and development has given a high priority. Mr. Yadav added, we are not unaware of the situation since the insurgency that agriculture research always kept in priority-II from Tenth five year plan and afterwards three years interim plan and several infrastructure of agriculture research were damaged during that period. Even then NARC did tremendous job in the development of agriculture research. There are few commodities like vegetables, potato, big cardamom, ginger, and orthodox tea. Due to emergence of dairy cooperative now milk holidays are removed. But still we should have to do a lot and for which nation is looking for a dynamic and progressive programme and I commit you all, from your support the nation will achieve the national goal in the agricultural sector.

Training, Workshop/Seminar, Study and Tours

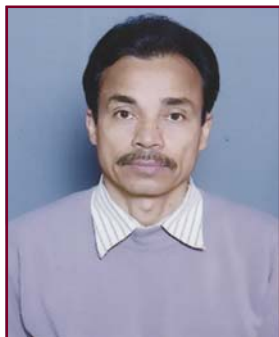
January - June 2011

S.N.	Name	Position	Office	Subject	Duration	Country
1.	Sham Bahadur Shrestha	Sen.Tech.Off (T8)	Bovine and Avine Research Program, Khumaltar	Dairy husbandry and milk processing	24 Jan 22July, 2011	Netherland
2.	Janmejaya Tripathi	Senior Scientist (S4) /Coordinator	National Wheat Research Programme, Bhairahawa	Seed industry program 2011	Jan 1721, 2011	Hyderabad,India
3.	Dr.Deepak Bhandary	Senior Scientist (S4)	National Wheat Research Programme, Bhairahawa	Seed industry program 2011	Jan 1721, 2011	Hyderabad,India
4.	Nutan Raj Gautam	Senior Scientist(S3)	National Wheat Research Programme, Bhairahawa	Seed industry program 2011	Jan 1721, 2011	Hyderabad,India
5.	Bechan Prasad Yadav	Technical Officer (T6)	National Wheat Research Programme, Bhairahawa	Interaction between farmers and scientists	23-Jan11	BHU, India
6.	Govinda Prasad Paudel	Technician (T5)	National Wheat Research Programme, Bhairahawa	Interaction between farmers and scientists	23-Jan11	BHU, India
7.	Krishna Kanta Sharma	Technician (T4)	National Wheat Research Programme, Bhairahawa	Interaction between farmers and scientists	23-Jan11	BHU, India
8.	Ram Dhani Tharu	Technician (T4)	National Wheat Research Programme, Bhairahawa	Interaction between farmers and scientists	23-Jan11	BHU, India
9.	Hom Prasad Bastola	Technician (T4)	National Wheat Research Programme, Bhairahawa	Interaction between farmers and scientists	23-Jan11	BHU, India
10.	Mrs.Krishna Kumari Paudel	Technician (T4)	National Wheat Research Programme, Bhairahawa	Interaction between farmers and scientists	23-Jan11	BHU, India
11.	Sagar Pandey	Technicial (T1)	National Wheat Research Programme, Bhairahawa	Interaction between farmers and scientists	23-Jan11	BHU, India
12.	Pramod Acharya	Administrative assistant (A5)	National Wheat Research Programme, Bhairahawa	Interaction between farmers and scientists	23-Jan11	BHU, India
13.	Yogendra Prasad Yadav	Technician (T3)	National Wheat Research Programme, Bhairahawa	Interaction between farmers and scientists	23-Jan11	BHU, India
14.	Baitula Khan Pathan	A1	National Wheat Research Programme, Bhairahawa	Interaction between farmers and scientists	23-Jan11	BHU, India
15.	Ram Krishna Mahato	Senior Sciensit (S4)	RARS, Tarahara	Study Visit to International Rice Research Institute	14 Feb-30 April, 2011	Phillippines
16.	Bedananda Chaudhary	Senior Scientist (S4)/Chief	RARS, Tarahara	Workshop on Resistance to Rice Sheath Blight	17-18 Feb. 2011	India
17.	Keshav Ghimire	Scientist (S1)	Singhdurbar Plaza	R & D Course on Post harvest physiology and handling of fresh commodities	22 Feb16 March	Isreal
18.	Roshan Basnet	Senior Scientist (S3)	RARS, Lumle	Training Course on Seed Health	27 Feb- March 10, 2011	Syria
19.	Manoj K. Thakur	Senior Scientist (S3)	CPDD, Khumaltar	CSISA Community Radio Workshop	28Feb2 March, 2011	Bangladesh
20.	Surya Narayan Sah	Senior Scientist (S4)/Coordinator	National Rice Research Programme, Hardinath	The Regional meeting on increasing rice productivity in underexploited areas of SAARC Countries	10-11 March, 2011	Thailand
21.	Dr. Bhartendu Mishra	Executive Director	Singhdurbar Plaza	Visiting Scientist to CIMMYT, Mexico	11-17 April, 2011	Mexico
22.	Umesh Kumar Acharya	Scientist (S1)	Singhdurbar Plaza	Ph.D Study (Horticulture)	12 March, 2011- March 11, 2015	Australia
23.	Madan RajBhatta	Senior Scientist (S4)/Chief	Gene Bank, Khumaltar	International Treaty on Plant Genetic Resource on Food, Agriculture and Marketing	14-18 March, 2011	Indonesia
24.	Ram Baran Yadav	Senior Scientist (S4)	National Rice Research Programme, Hardinath	Biotechnology Laboratory Work on Identification of Major QTLs for Grain Yield under drought Study Visit	30 March 31 May, 2011	Phillippines

25.	Dr. Dhruva Raj Bhattarai	Scientist (S1)	Horticulture Research Division, Khumaltar	Study Tour	4-7 April, 2011	India
26.	Tika Ram Chapagain	Senior Scientist (S3)	ARS, Pakhribas	Study Tour	4-7 April, 2011	India
27.	Dr. Niranjana Prasad Adhikari	Director, Crop & Horticulture	Singhdurbar Plaza	Inception Meeting and Planning Workshop "STRASA"	5-6 April, 2011	India
28.	Surya Narayan Sah	Senior Scientist / Coordinator	National Rice Research Programme, Hardinath	Inception Meeting and Planning Workshop "STRASA"	5-6 April, 2011	India
29.	Mrs. Sarala Sharma Lohani	Senior Scientist (S4)	Plant Pathology Division, Khumaltar	Meeting of the Inter governmental Experts Meeting on Yellow Rust (Wheat Disease)	5-7 April, 2011	India
30.	Reshma Neupane	Senior Technical Officer (T7)	Agronomy Division, Khumaltar	Lentil Training Programme	16 April-6 May, 2011	Syria
31.	Dr. Jwala Bajracharya	Senior Scientist (S4)/Chief	Seed Science and Technology Division, Khumaltar	Horticulture CRSP Spring 2011, Conference and International Advisory Board Meeting	18-22 April, 2011	USA
32.	Dr. Madhusudan Ghale	Senior Scientist (S4)/Chief	CPDD, Khumaltar	Training Workshop on Coherence in information for Agricultural Research for Development & Strengthening RAIS in the SAARC Countries	10-12 May, 2011	Bangladesh
33.	Pradip Kumar Yadav	Senior Technical Officer (T7)	Commercial Crop Division, Khumaltar	Training Course on Pollution Free Tea Production Technology for Developing Countries	11 May to July 10, 2011	China
34.	Umasanker Pandey	Senior Technical Officer (T7)	NWRP, Bhairahawa	Training Course on Hybrid Rice Technology for Asian Countries	18 May to September 6, 2011	China
35.	Jinu Shrestha	Technical Officer (T6)	Agri. Engineering Division, Khumaltar	Official Seminar on Agricultural Machinery for Developing Countries	20 May to June 9, 2011	China
36.	Dr. Min Nath Paudel	Senior Scientist (S4)/Chief	Outreach Research Division, Khumaltar	NARC-ICARDA Collaborative Program Visit	21-26 May, 2011	Syria
37.	Madan Raj Bhatta	Senior Scientist (S4)/Chief	Gene Bank, Khumaltar	AFACI Research Project Principal Investigator Meeting	31 May- 3 June, 2011	Republic of Korea
38.	Rajendra Pandit	Senior Financial Officer (A7)	Singhdurbar Plaza	The Training Course on Solving Human & Organizational Problem (SHOP)	8-28 June, 2011	Japan
39.	Bahuri Prasad Chaudhary	Senior Scientist (S4)/ Chief	Jute Research Program, Itahari, Susari	International Seminar on Strengthening of Jute, Kenaf and allied Fibres Research & Development	8-9 June, 2011	Bangladesh
40.	Dr. Dhruva Bahadur Thapa	Senior Scientist (S4)	Agri. Botany Division, Khumaltar	Annual BGRI Technical Workshop	13-16 June, 2011	USA
41.	Nutan Raj Gautam	Senior Scientist (S3)	NWRP, Bhairahawa	Annual BGRI Technical Workshop	13-16 June, 2011	USA
42.	Mrs. Sarala Sharma	Senior Scientist (S4)	Plant Pathology Division, Khumaltar	Annual BGRI Technical Workshop	13-16 June, 2011	USA
43.	Rajendra Kumar Bhattarai	Scientist (S1)	Agronomy Division, Khumaltar	International Training on Weed Management Aspects under RCTs	13 June-12 September, 2011	India
44.	Janga Bahadur Prasad Sah	Senior Technical Officer (T7)	RARS, Parwanipur	Training Course on Edible Mushroom Technology for Developing Countries	22 June-2 August, 2011	China

NARC Scientist obtained Ph.D.

Mr. Tara Bahadur Ghimire, Senior Scientist (S-4) of Nepal Agricultural Research Council (NARC) has obtained Ph.D. in Agronomy from G.B. Pant University of Agriculture and Technology Pantnagar (Uttarakhand), India in February, 2011. He has done his dissertation on “Effect of fertility levels on mustard (*Brassica juncea* L.) productivity under varying poplar tree densities” with the objectives to study the effect of different levels of NPK on growth, productivity and seed quality of Indian mustard and changes in soil physico-bio-chemical properties and nutrient balance under different poplar tree densities.



The result indicated that mustard growth was not influenced by the poplar tree densities except early stage. Mustard seed yield was not influenced by tree densities but only the vegetative growth (stover yield) was affected adversely under trees. Oil content and yield remained unaffected but glucosinolate content was elevated underneath trees. Soil organic carbon (SOC) and electrical conductivity increased underneath trees. Soil microbial biomass carbon (SMBC) and dehydrogenase activity (DHA) rose with increased tree densities. Available N and P

balance were negative and maximum negative balance of available P was recorded under 500 trees/ha density. However, available K balance was positive. Higher density (500 and 1000 trees/ha) proved to be economical based on both the tree output (Rs 84,000-103,000/ha/year) and crop yield with soil improvement.

Seed, stover and biological yields were improved upto 100% (120:40:20 kg NPK/ha) and 125% of recommended NPK in 2008-09 and 2009-10, respectively. Oil content decreased but oil yield improved upto 100% of recommended NPK. Glucosinolate content and protein yield increased with increased fertility levels. SOC and SMBC were improved upto 75% of recommended NPK. The maximum negative balance of available N and P were observed with 125% and positive balance of available K recorded with 100-125% of recommended NPK.

Dr. Ghimire born on November 30, 1960 in Gulmi, Nepal had his B.Sc. Ag. and M.Sc. Agronomy from Himachal Pradesh Krishi Vishvavidyalaya, Palampur (Kangara) H.P. India in 1991 and 1993, respectively. Dr Ghimire worked with different capacities in NARC entities worth mention here as Senior Scientist at National Oil Seed Research Program, Nawalpur, Sarlahi. He has been serving in Agriculture research and development for last 18 years.

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