

## BRIEF CURRICULUM VITAE OF KULVIR SINGH

**NAME:** Dr. Kulvir Singh  
**DESIGNATION:** Agronomist  
**MAILING ADDRESS:** Punjab Agricultural University  
Regional Research Station, Faridkot  
(Punjab)– 151203, India  
**Phone Number: +911639-251244 (office)**  
**Fax.+911639-256949 Mob.+ 91-94177-83052**  
**E-mail:** [kulvir@pau.edu](mailto:kulvir@pau.edu)  
[kulvir1974@gmail.com](mailto:kulvir1974@gmail.com)

**DATE OF BIRTH:** April 28, 1974

**FIELD OF SPECIALIZATION:** Cotton Agronomy

### EDUCATIONAL QUALIFICATION

Examination passed	University/Board	Division	OCPA/ out of 10	%age of marks	Year of passing
B.Sc. (Agri.) Hons.	Punjab Agricultural University, Ludhiana	First	3.72	81.0	1995
M.Sc. (Agronomy)	Punjab Agricultural University, Ludhiana	First	8.01	80.1	1997
Ph. D (Agronomy)	Punjab Agricultural University, Ludhiana	First	7.97	79.7	2002

**Title of M.Sc. Thesis:** Studies on the solar radiation interception, leaf area index and yield in soybean under different planting dates and densities

**Title of Ph.D. Thesis:** Characterization of Isoproturon resistance biotypes of *Phalaris minor* and their control in wheat

**PROFESSIONAL EXPERIENCE:** 11 years

- Agronomist (Cotton ) at PAU, Regional Station, Faridkot since 21.08.2009 to till date
- Asstt. Agronomist, at PAU, RS, Faridkot from 01.06.2004 to 20.08.2009
- Assistant Prof.(Agronomy ) at KVK, Faridkot, from 01.04.2003 to 31.05.2004.
- Assistant Prof.(Agronomy ) at KVK, Ferozepur from 21.08. 2000 to 31.03. 2003

### RESEARCH PROJECTS:

S. No.	Title of the project	Funding agency and budget (Rs lacs)		Year of start	Year of completion (Expected)
		Funding agency	Budget (Annual)		
<b>Regular projects</b>					
1.	All India Coordinated Cotton Improvement Project – Faridkot centre <b>ICAR-6b</b>	ICAR	52.2	1970	Cont.

Externally funded projects					
2.	Identification of innovative Bt Cotton based cropping system for cotton maximizing the use of natural resources under irrigated conditions	ICAR	4.50	2007-08	2011-2012

#### Adhoc projects handled:

S.No	Project Title	Contribution	Year of start	Funding agency
1.	Agricultural Technology Management Agency Project (ATMA)	Contributing Scientist	2003	NATP
2.	Village Adoption Project	Contributing Scientist	2005-07	CII & textile industries
3.	Establishment of new Agricultural Meteorological Field Unit at Regional Research Station, Faridkot (CSS-44)	Contributing Scientist	2008	IMD, Pune
4.	Identification of <i>G. hirsutum</i> genotypes suitable for machine picking and development of agronomic practices	Contributing Scientist	2007-08	ICAR

#### SIGNIFICANT ACHIEVEMENTS

##### i) TECHNOLOGY GENERATED AND RECOMMENDED TO FARMERS

- Associated in development/testing of the following technologies
- Recommended optimum time of sowing (whole of April –15th May) for general cotton cultivation in the state.
- Recommended chemical weed control in Arhar i.e Stomp 30 EC @ 1 litre/acre within two days of sowing or 600 ml Stomp 30 EC/acre combined with one manual hoeing 6-7 weeks after sowing for seasonal and broad leaf weed management.
- General cultivation of RCH-134 BGI, RCH-308 BGI, RCH- 314 BGI , RCH-317 BG1, MRC-6301 BGI, MRC6304 BGI , MRC-7017 BGII and MRC-7031 BGII, LH-2076, PAU626 H and FDK124 for Punjab state.
- Foliar application of KNO<sub>3</sub> @2% to get higher seed cotton yield .
- Recommended seed rate and/or plant spacing/crop geometry and fertilizer requirement of following cotton genotypes

S.no	Hybrid/Variety	Seed rate	Spacing (cm)	Fertilizer requirement/acre	
				N	P2O5
1	RCH-134 BGI	600g	67.5 X 90	60	12
2	RCH-308 BGI	750g	67.5 X 75	60	12
3	RCH- 314 BGI	750g	67.5 X 75	60	12
4	RCH-317 BG1	750g	67.5 X 75	60	12
5	MRC-6301 BGI	750g	67.5 X 75	60	12
6	MRC6304 BGI	750g	67.5 X 75	60	12
7	MRC-7017 BGII	750g	67.5 X 75	60	12
8	MRC-7031 BGII	750g	67.5 X 75	60	12
9	LH-2076	3.5 kg	67.5 X 60	30	12
10	PAU626 H	1.25kg	67.5 X 60	60	12
11	FDK124	3.0	67.5 X 45	30	12

- Recommended transplanting of 3 week old nursery grown in 4 “x 6” polythene bags filled with 1:1 mixture of soil and FYM for gap filling in cotton .
- Sunflower hybrid PSH-569 for general cultivation in the state.

## Appreciation /Awards/distinction received:

- **Appreciation letter from team of research scientists headed by Dr. Y.R Sharma (Sr. Plant Pathologist, PAU, Ludhiana)** vide his D.O.no.8231-32 dated 17.3.03 on account of excellent seed multiplication programme during Rabi 2002-03 and experimentation in pulse crops (gram) undertaken at KVK, Ferozepur.
- **Appreciation letter from Sh. C M Girdhar Project Co-coordinator for Indian Govt. sponsored scheme Gramin Bhandaran Yojna** vide his D.O.M O.R-12016/1/2002/ABH/216 dated 10.4.03 on account of better co-operation and successful conduct of the programme activities undertaken by KVK, Ferozepur
- **Appreciation letter from AD (Trg), KVK, Faridkot** vide his D.O.no.254-256 dated 31.5.04 for making the PAU, Regional kisan mela a grand success.
- **Merit Certificate from Head, Department of Agronomy & Agromet.;** PAU, Ludhiana by securing First position among all India participants in overall comprehension in the ICAR sponsored summer school held at PAU, Ludhiana from 28.6.05 to 18.7.05.
- Received Appreciation letter from Vardhman Group for being instrumental in extension activities through Viilage Cluster Adoption Programme targeted at improving production / productivity of cotton in Punjab. **H.E Dr. A P J Abdul Kalam President of India lauded** the success of programme at Village Gehri Buttar on Dec. 10, 2005.
- Appreciation letter from **Principal Investigator (Agronomy) All India Coordinated Research Programme (Sugarcane) and Head, Deptt. of Agronomy, GBPUAT,Pantnagar** who visited PAU, RS, Faridkot on 7-8.6.06 on account of Agronomic experimentation and seed production in sugarcane at PAU,RS,Faridkot vide his D.O. no.CA/Agro/405 dated 15.6.06
- **Appreciation from Sr. Cotton Breeder vide PAU, RS, Faridkot office** D.O no.714-19 dated 19.04.2010 on account of Recommendation of FDK-124 being the first and only variety recommended for general cultivation under irrigated conditions in the states of Punjab, Haryana and Rajasathan by Project- coordinator and Head ,AICCIP, CICR, Regional Station, Coimbatore vide his office letter no. PC/5/12/2010 Dated 13.4.2010
- Received 2<sup>nd</sup> Best poster award in National conference on **Paradigm shift in cotton research and cultivation** held at NAU,Navsari from 19-21oct.2010
- **Appreciations from Director Extension Education, PAU, Ludhiana vide D.O no.DE/IV /11344** dated 28.3.2011 and **Director, PAU, RS, Faridkot** for excellent organization of 1<sup>st</sup> Regional kisan mela at Faridkot office memo. No.1025 dated 1.4.2011
- Appreciation letter from Project Co-coordinator (AICCIP -cotton) Vide **Endst. No.2840-44 Dated 4.10.2011** for excellent experimentation on cotton crop and nice FLD 'S programme.
- **Ch Devi Lal outstanding All India Coordinated Rsearch Project ( AICRP ) 2006** award by Ministry of Agriculture, Govt. of India, for outstanding contribution in the field of Coordinated research on cotton (AICCIP).
- Merit certificates **during B.Sc (Agri.), M.Sc. Agronomy** for having OCPA > 8.0/10.00
- Merit fellowship **during B.Sc (Agri.), M.Sc. Agronomy and Ph.D (Agronomy)**

## PARTICIPATION IN TRAINING COURSES/REFRESHER COURSES/SUMMER INSTITUTES

S.No.	Title of the Course	Duration	Name of the Institute
1	Organic Farming	23.12.03-12.1.04	ICAR Sponsored, Deptt. of Agron. GBPUAT, Pantnagar
2	ICAR sponsored Summer school on Resource conservation for higher productivity and sustainability	28.6.05 to 18.7.05	PAU, Ludhiana
3	Crop diversification for sustainable crop production	8.11.006 to 28.11.06	ICAR Sponsored, Deptt. of Agron. GBPUAT, Pantnagar
4	Training cum Awareness Programme on PPV &FR Act - 2001	23 <sup>rd</sup> July 2009	Department of Plant Breeding PAU Ludhiana at Faridkot

### Additional activities:

i) Member of Monitoring team of All India Coordinated Cotton Improvement Project (AICCIP) for monitoring of Cotton Agronomy trials in North Zone during 2007 and 2008

### ii) Compilation of Annual Reports

- Annual Report (Agronomy) of All India Co-ordinated Cotton Improvement Project from 2004-05 to 2010-11
- Annual Progress Report (Punjab state) of All India Co-ordinated Cotton Improvement Project from 2004-05 to 2010-11
- Annual Progress Report (Punjab state) of TMC PROJECT “Identification of innovative Bt Cotton based cropping system for cotton maximizing the use of natural resources under irrigated conditions” from 2007-08 to 2010-11
- Annual Report (Agronomy) of All India Coordinated Research Project on Sugarcane from 2005 to 2007
- Annual Progress Reports of PAU, Regional Research Station, Faridkot till date
- Annual Progress Report of Front Line Demonstrations under All India Co-ordinated Cotton Improvement Project from 2004-05 to 2010-11
- Preparation of QRT Report on salient research achievement of cotton

### iii) **Participation in seminars, conferences, symposia and workshops:**

S. No.	Name of the Seminar/ Symposia / Workshop/Conference	Name of the organizing Institution & date
1.	Agricultural officer's Workshop on Kharif and Rabi crops	PAU, Ludhiana
2.	National Symposium on Resource Conservation and Agricultural Productivity	Indian Society of Agronomy, ICAR & PAU, Ludhiana from Nov.22-25,2004
3.	UGC Sponsored National Seminar on Resource Management for Sustainable Agriculture (RMSA)	Deptt. of Agron., Annamalai Univ., Tamilnadu 17-18 Mar.2005
4.	Cotton seminar cum training camp	21 March 2006, PAU, RS, Faridkot
5.	QRT Review committee meeting	CICR, Sirsa (28.4.07)
6.	National Seminar on Varietal planning for improving productivity and sugar recovery in sugarcane	Ministry of Agric. And Deptt. of Agronomy, GBPUAT, Pantnagar, Utrakhand (14-15, Feb 08)

7.	National symposium on “New paradigms in Agronomic research”	<b>Indian Society of Agronomy nov.19-21 ,2008 at Navsari Agricultural university, Navsari, Gujrat</b>
8.	9th Agricultural Science Congress	<b>National Academy of Agricultural Sciences at Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir, Srinagar (JUNE 22-24,2009)</b>
9.	National Conference on Eco-friendly approaches in Sustainable Agriculture and Horticulture Production (Neem in Agriculture, Integrated pest and Nutrient Management)	<b>Doctor’s Krishi Evam Bagwani Vikas Sanstha Held at Amity University, Lucknow 28-30 Nov.2008</b>
10	12th Punjab Sci. Congress (Science and technology for betterment of society),	<b>PAU, Ludhiana and Punjab Academy of Sciences ,Patiala Feb7-9,2009</b>
11.	<b>AICCIP:</b> Attended a total of seven Annual Group Workshops of AICCIP (cotton) since 2004	<b>Different centres</b>
12.	<b>AICRP :</b> Attended Annual Group Workshops of AICRP (sugarcane) during 2005 and 2007	<b>-do-</b>

## **RESEARCH PRIORITIES:**

### ✓ **MAJOR ISSUES IN COTTON**

- Declining / plateauing seed cotton yield, declining factor productivity
- Abnormally high temp. throughout crop growth period esp. at seedling stage causing burning thereby resulting into poor plant stand causing low yield
- High cost of cultivation, high labour requirement and its non availability
- Competition with Rice having assured marketing and fully mechanized operations
- Brackish underground water and its unfitness for crops of South-western districts and poor soil health resulting in leaf reddening and related maladies causing yield reduction
- Low yields when planting is delayed.

### ✓ **STRATEGIES AND PROGRAMMES**

#### **INCREASING THE LEVELS OF SEED COTTON YIELD**

- Agronomical evaluation of improved cotton genotypes with sp. ref. to stress/heat tolerance
- Designing and developing planting methods, planting geometry and integrated nutrient supply system for optimization of seed cotton yield
- Balancing nutrition requirement to sustain high productivity

#### **ARRESTING THE DECLINE IN FACTOR PRODUCTIVITY**

- Crop residue recycling
- Introduction of legumes in cropping system

#### **REDUCING THE COST OF CULTIVATION**

- Enhancing input use efficiency & reduced use of costly inputs for enhancing productivity
- Mechanizing cotton cultivation esp. picking
- INM in cotton based cropping system
- In-depth studies on genotypic compatibility, planting time, integrated fertilizer management, use of herbicides to manage weeds, water management, harvesting practices, mechanization and residue management to optimize agronomic practices under intercropping systems and most efficient use of production resources.

## MEMBERSHIP OF PROFESSIONAL/SCIENTIFIC SOCIETIES

- **Member of Editorial board of Cotton Research and Development Association, CCS HAU, Hisar publishing J. Cotton Res. Dev. (NAAS rated 4.3)**
- **Member of Indian Society of Agronomy, Ludhiana chapter**
  - **Life Member, Indian Society of Agronomy, New Delhi**
  - **Life Member, Cotton Research and Development Association, Hisar**
  - **Life Member, PAU, Journal of Research, Ludhiana**
  - **Life Member, Punjab Academy of Sciences, Patiala**
  - **Life Member, PAU, Popular article Journal Progressive Farming, Ludhiana**

## LIST OF PUBLICATIONS

**Total publications : 74**

Full Research Publications : 28

Abstracts/Papers in symposia/conferences : 18

Extension Publications : 28

### **A: RESEARCH PAPERS PUBLISHED IN JOURNALS: 28**

1. **Singh Kulvir**, Harmandeep Singh, Pankaj Rathore and R K Gumber. 2011. Response of desi cotton (*Gossypium arboreum* L.) genotypes to plant geometries and nutrient levels under irrigated conditions J. Cotton Res. & Dev. (in press)
2. **Singh Kulvir**, Harmandeep Singh, R K Gumber and Pankaj Rathore. 2011. Performance of cotton genotypes under different planting dates in South western Punjab. J. Cotton Res. & Dev. 25 (2): 210-213
3. Kaul Amit, J S Deol and **Kulvir Singh**. 2011. Growth and yield of Bt cotton (*Gossypium hirsutum* L.) as affected by methods of establishment. Indian J. Ecol. 38 (1): 49-52
4. Singh Guriqbal, Hari Ram, Navneet Aggarwal, G S Butar, **Kulvir Singh**, Harpreet Kaur and Veena Khanna. 2010. Bioefficacy of pendimethalin for the control of weeds in pigeonpea [*Cajanus cajan* (L.) Millsp.]. J. Res. Punjab agric Univ 47: 121-126.
5. **Singh Kulvir** and Rupinder Singh. 2009. Effect of planting geometry and nitrogen levels on performance of Bt cotton cultivar RCH-134. J. Res. Punjab agric. Univ. 46:14-16
6. Singh Kuldeep, MS Bhullar, **Kulvir Singh** and SK Uppal. 2009. Effect of planting techniques for spring planted sugarcane." J. Res., Punjab agric. Univ. 46:138-140
7. Buttar, GS, P Kaur and **Kulvir Singh**. 2008. Role of transfer of technology in increasing cotton production and productivity in Punjab. Pp:100-105 In "Cotton Research in Punjab"- PAU publication released during Annual Group meeting of All India Coordinated Cotton improvement Project held at PAU, Ludhiana on Apr 9-11, 2008
8. **Singh Kulvir**, P Kaur. GS Buttar and A Singh. 2008. Agronomic management of cotton for higher productivity. Pp:57-65. Cotton research in Punjab-PAU publication released during Annual Group meeting of All India Coordinated Cotton improvement Project held at PAU, Ludhiana on Apr 9-11, 2008
9. **Singh Kulvir** and P Rathore. 2007. Effect of different spacing and nitrogen levels on growth and yield attributes of American cotton (*Gossypium hirsutum* L.) genotypes. J. Cotton Res. & Dev. 21 (2): 178-179
10. **Singh Kulvir** and JS Gill. 2007. Effect of different spacing and nitrogen levels on growth and yield attributes of Desi cotton (*Gossypium arboreum* L.) hybrids. J. Cotton Res. & Dev. 21 (1): 77-79
11. **Singh Kulvir**, V Jindal, V Singh and P Rathore. 2007. Performance of Bt cotton hybrids under different geometrical arrangements. J. Cotton Res. & Dev. 21 (1) : 41-44
12. **Singh Kulvir**, Kuldeep Singh, HR Garg and P Rathore. 2006. Effect of nutrients on productivity of seed cotton yield and other ancillary parameters in American cotton. J. Cotton Res. & Dev. 20 (2): 216-218

13. **Singh Kulvir** and HC Kundra. 2003. Bio-efficacy of herbicides against Isoproturon Resistant Biotypes of *Phalaris minor* in Wheat. Indian J. Weed Sci. 35: 15-17
14. **Singh Kulvir** and HC Kundra. 2003. Germination and Emergence Characteristics of Isoproturon- Resistant biotypes of *Phalaris minor* Retz. Biotypes at variable Temperature and seed placement depth. Indian J. Weed Sci. 35: 104-106.
15. **Singh Kulvir** and HC Kundra. 2002. Characterization of Isoproturon –resistant biotypes of *Phalaris minor* Retz. Pp: 32-34 In Proc. *International workshop on "Herbicide resistant management and Zero-tillage in Rice –Wheat cropping system"* held at CCSHAU, Hisar (Haryana) from 4-6 March, 2002.
16. Kaur Navjot, Sarabjeet Singh, DS Kler, **Kulvir Singh** and NS Dhillon. 2001. Relationship studies amongst growth ,nutrient uptake, temperature indices, yield contributing characters and yield of sunflower (*Helianthus annuus L.*) cultivars. Indian J. Environ. & Ecoplan. 5(1): 153-158.
17. Singh Sarabjeet, Navjot Kaur, DS Kler and **Kulvir Singh**. 2001. Growth analysis, phenology and yield dynamics of sunflower (*Helianthus annuus L.*) Cultivars as influenced by date of sowing under Punjab conditions. Environ. & Ecol. 19(1): 60-66.
18. Kaur Navjot, DS Kler, Sarabjeet Singh and **Kulvir Singh**. 2001. Effect of sowing dates in relation to temperature and light interception on yield of sunflower (*Helianthus annuus L.*) cultivars. Indian J. Environ. & Ecoplan. 5(1): 189-194.
19. **Singh Kulvir**, Sarabjeet Singh and DS Kler. 2000. Correlation and regression studies among various growth and yield parameters of soybean (*glycine max.(L.) Merrill*) under Punjab conditions. Crop Res. 19(2): 287-297.
20. Singh Sarabjeet, **Kulvir Singh**, Navjot Kaur and DS Kler. 2000. Growth, development and seed yield of sunflower cultivars as influenced by differential dates of sowing under Punjab conditions. Environ. & Ecol. 18(4):905-911.
21. Singh Sarabjeet, Navjot Kaur, DS Kler and **Kulvir Singh**. 2000. Performance of early and late maturing cultivars of sunflower (*Helianthus annuus L.*) planted under five dates. Indian J. Environ. & Ecoplan. 3(3): 729-733.
22. Kaur Navjot, Sarabjeet Singh, **Kulvir Singh** and DS Kler. 2000. Influence of planting time and cultivars on seed, protein & oil yields and quality of sunflower (*Helianthus annuus L.*). Indian J. Environ. & Ecoplan. 3(3): 619-622.
23. Singh Sarabjeet, **Kulvir Singh** and DS Kler. 2000. Influence of Planting time and plant geometry /density on periodic dry matter accumulation and seed yield of soybean (*glycine max. (L.) Merrill*). Crop Res. 20(1): 76-80.
24. **Singh Kulvir**, Sarabjeet Singh and DS Kler. 1999. Effect of planting dates and densities on yield contributing characters and grain yield of Soybean (*glycine max. (L.) Merrill*) Environ. & Ecol. 17 (1) : 171-75
25. **Singh Kulvir**, Sarabjeet Singh and DS Kler. 1999. Growth analysis and yield of soybean (*glycine max.(L.) Merrill*) as influenced by date of sowing and plant rectangularities. Indian J. Environ. & Ecoplan. 2(1): 19-25
26. Singh Sarabjeet, **Kulvir Singh**, DS Kler and NS Dhillon. 1999. Relationship studies among PAR interception,LAI,yield contributing characters and yield of soybean (*glycine max.(L.) Merrill*) sown under different times,densities and geometries. Indian J. Environ. & Ecoplan. 2(1): 61-68
27. Singh Sarabjeet, **Kulvir Singh** and DS Kler. 1999. Effect of sowing dates, densities and plant rectangularities on growth and seed yield of Soybean (*glycine max. (L.) Merrill*) Environ. & Ecol. 17 (2): 436-443
28. Singh Sarabjeet, **Kulvir Singh** and DS Kler. 1998. Influence of date of sowing and plant geometry/density on seed and oil yields and quality aspects of Soybean (*glycine max. (L.) Merrill*). Indian J. Environ. & Ecoplan. 1(1&2): 67-72

## **B: PAPERS PUBLISHED IN SYMPOSIA/SEMINARS: 18**

1. **Singh Kulvir**, Harmandeep Singh, J S Gill and Pankaj Rathore. 2011. Seed Cotton Yield, yield attributes and growth parameters of cotton genotypes as influenced by sowing dates. Pp. 323 *In Proc. International Conference on Preparing Agriculture for Climate Change*. Organized by The Crop Improvement Society of India and Punjab Agricultural University, Ludhiana from 6-8 February, 2011.
2. **Singh Kulvir**, Harmandeep Singh, Kuldeep Singh and R K Gumber. 2011. Performance of Bt cotton hybrids under different planting methods. Pp. 324 *In Proc. International Conference on Preparing Agriculture for Climate Change*. Organized by The Crop Improvement Society of India and Punjab Agricultural University, Ludhiana from 6-8 February, 2011.
3. **Singh Kulvir**, Jaspal Singh and Kuldeep Singh. 2010. Agronomic manipulations for yield enhancements of new desi cotton hybrids. Pp 39 *In Proc. 13th Punjab Science Congress* organised by Punjab University, Chandigarh from Feb.7-9, 2010.
4. **Singh Kulvir**, Pankaj Rathore and J S Brar. 2010. Productivity evaluation of some newly released Bt cotton hybrids under different spatial arrangements. Pp 40 *In Proc. 13th Punjab Science Congress* organised by Punjab University, Chandigarh. From Feb.7-9, 2010.
5. **Singh Kulvir**, Kuldeep Singh and Harmandeep Singh. 2010. Evaluation of efficient weed management strategies in pigeonpea (*Cajanus cajan*). Pp. 278 *In Proc. XIX National Symposium on Resource Management Approaches towards Livelihood Security*. Organized by Indian Society of Agronomy, Indian Council of Agricultural Research and University of Agricultural Sciences, held at University of Agricultural Sciences, Bengaluru, Karnataka from 2-4 December, 2010.
6. **Singh Kulvir**, Harmandeep Singh, R K Gumber and Pankaj Rathore. 2010. Studies on the seed cotton yield and yield contributing characters of new Bt cotton hybrids under varied agronomic manipulations. Pp. CP-5 *In Proc. National Conference on Paradigm Shift In Cotton Research and Cultivation*. Organized by Navsari Agricultural University, Surat and Indian Society for Cotton Improvement, Mumbai from 19-21 October, 2010.
7. Singh Harmandeep, **Kulvir Singh**, J S Gill and Kuldeep Singh. 2010. Performance of different cotton genotypes under various dates of sowing in South-Western Punjab Pp. CP-20 *In Proc. National Conference on Paradigm Shift In Cotton Research and Cultivation*. Organized by Navsari Agricultural University, Surat and Indian Society for Cotton Improvement, Mumbai from 19-21 October, 2010.
8. Singh Kuldeep, **Kulvir Singh**, MS Gill and RS Singh. 2009. Evaluation of sugarcane genotypes under different nitrogen levels in South-western Punjab. Pp 101. *In Proc. 9<sup>th</sup> Agricultural Science Congress* Organized by SKUAST on *Technological and Institutional Innovations for Enhancing Agricultural Income*.
9. **Singh Kulvir**, Rupinder Singh and Kuldeep Singh. 2009. Studies on the performance of Bt cotton hybrids and biovita for improving productivity. Pp.60 *In Proc. National Symposium “ Bt cotton :Opportunities and Prospects”* organised by Central Institute of Cotton Research, Nagpur-440 010 from Nov. 17-19, 2009.



10. **Singh Kulvir**, Rupinder Singh and Jaspal Singh Gill. 2009. Agronomic Requirements of Ankur *Bt* Cotton Hybrids in South-western Punjab. Pp 323 *In Proc.* 9th Agricultural Science Congress. organised by National Academy of Agricultural Sciences, held at Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir, Srinagar from June 22-24, 2009.
11. **Singh Kulvir**, Kuldeep Singh, Rupinder Singh and Pankaj Rathore. 2009. Productivity Evaluation of New *Bt* Cotton Hybrids under different Spatial arrangements. Pp 324 *In Proc.* 9th Agricultural Science Congress organised by National Academy of Agricultural Sciences, held at Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir, Srinagar from June 22-24, 2009.
12. **Singh Kulvir**, Rupinder Singh and Kuldeep Singh. 2009. Studies on the seed cotton yield and yield contributing characters of some newly released *Bt* cotton hybrids under varied plant geometries. Pp 30 *In Proc.* 12<sup>th</sup> Punjab Sci. Congress (Science and technology for betterment of society), organised by PAU, Ludhiana from Feb7-9, 2009.
13. **Singh Kulvir**, Pankaj Rathore and Jaspal Singh Gill. 2009. Agronomic evaluation of Vibha *Bt* cotton hybrids of American cotton (*Gossypium hirsutum.L*) in high pH soil conditions of Faridkot. Pp 31 *In Proc.* 12<sup>th</sup> Punjab Sci. Congress (Science and technology for betterment of society) organised by PAU, Ludhiana from Feb7-9, 2009.
14. **Singh Kulvir**, Jaspal Singh Gill and Pankaj Rathore. 2008. Response of *Bt* cotton hybrids to nutrient combinations in South-Western Punjab. pp 131-32 *In Proc.* National Conference on Eco-friendly approaches in Sustainable Agriculture and Horticulture Production (Neem in Agriculture, Integrated pest and Nutrient Management) organised by Doctor's Krishi Evam Bagwani Vikas Sanstha Held at Amity University, Lucknow from Nov.28-30, 2008.
15. **Singh Kulvir**, R Kumar and Kuldeep Singh. 2008. Studies on the compatibility of Zinc application with sources and levels of Phosphorus on yield and yield attributes of sugarcane (*Saccharum officinarum*) in Punjab. Pp: 200-201 *In Proc.* National Seminar on varietal planning for improving productivity and sugar recovery in sugarcane organized by GB Pant University of Agriculture and Technology, Pantnagar (India) from February 14-15, 2008.
16. Singh Kuldeep, **Kulvir Singh**, MS Bhullar and RS Singh. 2008. Evaluation of promising midlate sugarcane genotypes vis a vis nitrogen requirement for south west Punjab. Pp:207-209 *In Proc.* National Seminar on Varietal planning for improving productivity and sugar recovery in sugarcane organized by GB Pant University of Agriculture and Technology, Pantnagar (India) from February 14-15, 2008.
17. Kumar R, **Kulvir Singh** and SK Uppal. 2008. Response of sugarcane to various organic farming modules. Pp:237-239 *In Proc.* National Seminar on Varietal planning for improving productivity and sugar recovery in sugarcane organized by GB Pant University of Agriculture and Technology, Pantnagar (India) from February 14-15, 2008.
18. **Singh Kulvir**, HR Garg and P Rathore. 2005. Effect of macro and micronutrients on Seed cotton yield and quality parameters in American cotton at Faridkot. Pp: 165 *In Proc.* UGC Sponsored National Seminar on Resource Management for Sustainable Agriculture (RMSA) organized by Deptt. of Agron., Annamalai Univ.,Tamilnadu from March 17-18, 2005.

## C: EXTENSION ARTICLES :28

1. **Singh Kulvir**, R K Gumber and Pankaj Rathore. 2011.Spray potassium nitrate (13:0:45) on cotton for higher yield. *Progressive Farming* (August 2011): Pp: 5-6
2. **Singh Kulvir**, Harmandeep Singh and J S Gill. 2011. Narme da jhar vadhaun lai potassium nitrate (13:0:45) di mahatata. *Changi Kheti* (July 2011): Pp: 13
3. Buttar GS and **Kulvir Singh** (2011). Narme kapah:Vadh Pedavar lai de sudhre kashatkari dhang varto. *Changi Kheti* (March 2011): Pp:15-16
4. Buttar GS and **Kulvir Singh**. 2011. Agronomic practices for successful cotton growing.*Progressive Farming* (March 2011): Pp: 32-33
5. **Singh Kulvir**, P Kaur and GS Buttar. 2010. Narme kapah de sudhri taqniqi kashat karo.*Changi Kheti* (March 2010): Pp: 12-13
6. **Singh Kulvir**, P Kaur and Manpreet Singh. 2010. Improving whitegold productivity through agronomic management. *Progressive Farming* (March 2010): Pp: 11-12
7. **Singh Kulvir**, P Kaur and GS Buttar.2009. Narme kapah de taqniqi kashat kiwen kariye.*Changi Kheti* (March 2009): Pp: 9-10
8. Kaur P, **Kulvir Singh** and Manpreet Singh. 2009. Agronomic practices for cotton cultivation.*Progressive Farming* (March 2009): Pp: 13-14
9. **Singh Kulvir**, P Kaur and JS Gill. 2008. Improved agronomic practices for cotton cultivation.*Progressive Farming* (March 2008): Pp: 9-10
10. Kaur P, **Kulvir Singh** and MS Gill. 2008. Narme ate kapah de kashat de sudhre taqniqi nukte.*Changi Kheti* (March 2008): Pp: 20-21
11. **Singh Kulvir**. 2007. Hari season doran faslan vich nadeennashak dawaian dee sahi varton kiwen kariye.*Kheti Duniya*. Dec.2007. Pp 10
12. Brar AS, **Kulvir Singh** and RS Sohu. 2007. Narme kapah de sudhre kashatkari dhang apnao. *Changi Kheti* (March 2007): Pp: 7-8
13. Gill JS , **Kulvir Singh** and MS Gill. 2007. A new desi cotton hybrid PAU-626H *Progressive Farming* (March 2007): Pp:11
14. **Singh Kulvir**. 2005. Bina wahai -kanak bijai,lagat ghat vadhere kamai. *Kheti Duniya* Pp-13 (Oct. issue) Spl. Rabi Festival issue
15. **Singh Kulvir**. 2005. Kanak da pilapan-karan ate ilaaz. *Kheti Duniya* Pp-4 (Nov. issue) Spl.Rabi III issue
16. **Singh Kulvir**. 2005. Hari season doran faslan vich naddeen nashak dawaian dee sahi warton kiwen kariye.*Kheti Duniya* pp-21(Oct. issue) Spl. Rabi Festival issue
17. Khosa K S and **Kulvir Singh**. 2005. Narme vich khadan ate pani di suchagi varton.*Changi Kheti* (May issue) Pp: 18-19
18. **Singh Kulvir**. 2005. Zaivik Kheti:Mool Sidhant,Vishv Vapar Sandhi de sandharb adeen kucg arthik/sarthik pehlu.. *Kheti Duniya* Pp-16-17(March issue)
19. **Singh Kulvir**. 2005.Sauni dee faslan ton bharpoor jhad lai kisman dee chone,khadan ate pani parbhandh kiwen kariye. *Kheti Duniya* Pp: 20-21(May issue)
20. **Singh Kulvir**. 2005. Sauni dee faslan vichon naddena dee sarvpakhi roktham .*Kheti Duniya* Pp-26-27(May issue)
21. **Kulvir Singh**. 2005. Sauni rute mungfali dee kasht de sudhre dhang. *Kheti Duniya* Pp-10 (june issue) Spl. Kharif Edition
22. Jindal V, R Arora and **Kulvir Singh**. 2005. Narme kapah dee fasal vich ras chosen wale kirian dee pachan ate roktham. *Modern Kheti* (june issue) Pp: 19-20
23. Khosa K S and **Kulvir Singh**. 2005.Narme vich khadan ate pani di suchagi varton.*Changi Kheti* (May issue) Pp: 18-19
24. **Singh Kulvir**. 2005. Zaivik Kheti:Mool Sidhant,Vishv Vapar Sandhi de sandharb adeen kucg arthik/sarthik pehlu.. *Kheti Duniya* Pp: 16-17(March issue) Kisan mela Spl.Edition

25. **Singh Kulvir**. 2005. Sauni dee faslan ton bharpoor jhad lai kisman dee chone,khadan ate pani parbhandh kiwen kariye. *Kheti Duniya* Pp: 20-21(May issue)
26. **Singh Kulvir**. 2005. Sauni dee faslan vichon naddena dee sarvpakhi roktham .*Kheti Duniya* Pp: 26-27(May issue)
27. **Singh Kulvir**. 2005. Sauni rute mungfali dee kasht de sudhre dhang. *Kheti Duniya* Pp-10 (june issue) Spl. Kharif Edition
28. Jindal V, R Arora and **Kulvir Singh**. 2005. Narmey kapah dee fasal vich ras chosen wale kirian dee pachan ate roktham. *Modern Kheti* (june issue) Pp:19-20
28. **Singh Kulvir**. 2005. Bina wahai -kanak bijai,lagat ghat vadhere kamai. *Kheti Duniya* Pp-13 (Oct. issue) Spl.Rabi Festival issue

## REFERENCES:

### **Dr R.K. Gumber**

Director  
PAU Regional Station,  
Faridkot 151 203 (Punjab), India  
01639-251244

### **Dr. M. S. Gill**

Director of Extension Education  
PAU, Ludhiana – 141004  
Punjab, India  
[diectorpau@yahoo.com](mailto:diectorpau@yahoo.com)

### **Dr. G.S. Buttar**

Senior Agronomist– cum- Head  
Department of Agronomy  
PAU, Ludhiana – 141004  
Punjab, India  
0161-2401960 Ext. 308

### **Dr. P L Nehra**

Professor Cum Principle Investigator (Crop Production)  
All India Coordinated Cotton Improvement Project (AICCIP)  
Rajasathan Agricultural University,ARS, Sri Ganganagar, Rajasathan, India,  
Phone Number: 91- 9412929400

(Kulvir Singh)