

Profile of Scientist



1. Name of the Scientist: Er. Sukhbir Singh

2. Personal Biodata:

a) **Position/Designation:** Senior Scientist (FMP)

b) **Contact Details:**

i. **ICAR Email ID:** Sukhbir.Singh @icar.gov.in

ii. **Personal Email ID:** ersukhbir75@gmail.com and srsukhbir@rediffmail.com

iii. **Mobile No.:** 7839455399

c) **Joining date in:**

i. **ICAR:** 19.03.2012

ii. **IISR:** 12.07.2013

d) **Discipline and Specialization:** Farm Machinery & Power

e) **Training/advance exposure in the area of work:**

- Training on “Front line demonstration of Agricultural Implements and Machinery (Testing and Instrumentation)” at C.I.A.E., Bhopal w.e.f. May21- June 02, 2001.
- Winter school on “Enhancing input application efficiency for seeds, fertilizer and chemicals using precision farm machinery, decision support system (DSS) and electronic controllers for precision agriculture in vertisols” at C.I.A.E., Bhopal w.e.f. January 01-21, 2010.
- Refresher course on “Agricultural Research Management” from 07-19• January 2013 at NAARM, Hyderabad.

f) **Contribution to the scientific advancement:**

- Develop power tiller operated zero-till drill, multicrop planter, bench-terracer cum leveler, seed drill.
- Develop manual comb, shaker and wire clip type seabuckthorn harvester.
- Develop hold on paddy thresher, pedal cum motor operated maize sheller.
- Develop vivek millet thresher cum dehusker/dehuller, manual/bullock operated multicrop planter, manual weed wiper, Amranth thresher.
- Commercialized power tiller operated zero-till drill, power tiller multicrop planter, manual/bullock multicrop planter, seed drill, garlic planter.
- Tested different mechanical power sources (3.1-18.5 hp) and many equipment viz. manual paddy transplanter, garlic planter, wheel hoe, cono weeder, serrated sickle, tubular maize sheller, self propelled reaper, maize dehusker cum sheller, mango & fruit harvester, CIAE repaer, BCS reaper binder etc. for its feasibility in hill agriculture.
- Tested three sugarcane cutter planters at IISR, Lucknow supplied by the manufacturers.

3. Future Planning of research (in bullets):

- To develop multipurpose tool frame with attachments for sugarcane cultivation
- To develop sugarcane machines for small and marginal farmers.
- To ergonomic study of different hand tools used in sugarcane cultivation, modifications if any to reduce drudgery.

4. Publications (best five):

- **Singh Sukhbir** and Vatsa DK.2007. Development and Evaluation of a Light Weight Power Tiller Operated Seed Drill for Hilly Region. *Agricultural Mechanization in Asia Africa and Latin America (AMA)*, Vol. 38 (3): 45-47.
- **Singh Sukhbir**.2007. Hill Agricultural Mechanization in Himachal Pradesh– A Case Study in Two Selected Districts. *Agricultural Mechanization in Asia Africa and Latin America (AMA)*, Vol. 38 (4): 18-25.
- **Singh Sukhbir**, Vatsa DK and Verma H N.2008. Prospects of Paddy Cultivation Mechanization in Hills of Himachal Pradesh. *Agricultural Mechanization in Asia Africa and Latin America (AMA)*, Vol. 39 (3): 46-49.
- Vatsa DK and **Singh Sukhbir**. 2010. Sowing methods with different seed drills for mechanizing mountain farming. *Agricultural Mechanization in Asia Africa and Latin America (AMA)*, Vol. 41 (1): 51-54.
- **Singh, S.**, and D. K. Vatsa. 2015. Present status, scope and future needs for mechanization of apple cultivation in mountains of Himachal Pradesh, India. *Agric Eng Int: CIGR Journal*, 17(4):109-114.
- **Sukhbir Singh**, D.C. Sahoo, N.K. Singh, and J.K. Bisht. 2015. Operator physiological response and bullock draughtability during primary tillage. *Agric Eng Int: CIGR Journal*, 17(4):115-120.
- **Singh Sukhbir**; Singh P R; Singh AK and Gupta Rajendra. 2016. Present status and future need of mechanizing sugarcane cultivation in India. *Agricultural Mechanization in Asia Africa and Latin America (AMA)*, Vol. 47 (1): 75-81.

5. Other relevant activities of Scientist:

Involved in various Institute activities