

Brief Profile

1. Name of the Scientist : Ram Dhiraj Singh

2. Personal Bio-data

A) Designation : Principal Scientist

B) Contact Details.

i) ICAR Email:

ii) Personal Email ID: ramdhiraj@rediffmail.com

iii) Mobile No. 09450369614

C) Joining date :

I) ICAR; 21..1.1992

II) IISR : 27.12.192

D) Discipline : Farm Machinery and Power

E) Training ;

Advances in seeding and harvesting machinery at PAU, Ludhiana	21/5/2001	19/6/2001
Wear Characteristics and selection of materials for agricultural machinery at CIAE, Bhopal	04/9/2001	24/9/2001

F) Contribution:

i) Research Projects

- Modern jaggery plant for production of Quality Jaggery at IISR, Lucknow,
- Forced draft system in two pan Furnace for fuel saving,
- Estimation of Post Harvest Losses in crops and commodities,
- Solar dryer for jaggery drying,
- Value addition of jageery with natural source of Vitamin -C

- Study of losses of Vitamin-c during storage of value added jaggery
- Evaporator for sugarcane juice for automation of jaggery production
- Packaging study of jaggery under shrink wrap, stretch wrap and modified atmosphere condition

ii) Books

Title	Authors	Year
• Processing, Handling and Storage of Sugarcane Jaggery,	Singh, J and Singh, R.D.	2008
• Mechanization of Sugarcane Cultivation, IISR, Lucknow.	Singh, J., Yadava, D.V., Singh, A.K. and Singh, R.D.	2010

iii) **Product** : Value Added jaggery with Vitamin-C

iv) **Process** : Process for production of Value added jaggery with natural source of vitamin-c

v) Equipment

- Solar Dryer for jaggry drying
- Evaporator for Sugarcane juice

3. Future planning of work :

- Development of Energy efficient Trash management Technology

4. Publications

Authors, Year of publication, Title of the paper	Journal Name, Volume and Page No.	NAAS Rating
1. Singh RD, Ram RB and Prasad N1998. Performance Indices of manually operated maize shellers.	<i>AMA, Vol29, No.2</i>	6.01
2.. Singh, R.D. , and Tiwari G.N.2000.Thermal heating of controlled environment greenhouse :	<i>Energy Conversion and management</i>	10.38

a transient analysis	41(2000)505-522	
3. Tiwari, G N, Nayak S, Dube S , Solanki S C and Singh R D 2009. Performance analysis of a conventional PV/T mixed mode dryer under no load condition.	International journal of Energy research , 33:919-930	8.42
4. Singh R D and G.N.Tiwari 2010. Energy conservation in the greenhouse system: a stead state analysis.	ENERGY – the International journal, (35):2367-2373.	10.84
5.Singh J, Singh R D , Anwar SI and Solomon S 2011. Alternative Sweeteners Production from Sugarcane in India :Lump Sugar(Jaggery)	Sugar Tech, 13(4):366-371	6.58
6.Singh, A.K., Baboo, B., Singh, RD. 2008. Performance Evaluation of Two Pan Furnace with forced draft system for Jaggery Making.	Journal of Agril. Engg. 45(2):29-33	4.27
7.Anwar, S.I. Singh, R.D. and Singh, J. 2009. Value addition of jaggery (<i>gur</i>) through natural source of vitamin C.	<i>Indian J of Sugarcane Technology</i> , 24 (1 & 2): 48-51	3.16
8. Singh, R.D. , Srivastava, A.C. and Shahi, H.N. 2009. Performance evaluation of seeder-cum-sugarcane cutter planter	Agricultural Engineering Today, 33(1): 3-6.	3.66

5. Other relevant Activities of the Scientist

- IMC member of the institute for three years