

1. Name : Dr. Surendra Singh

2. Designation: **Professor**

3. Academic Qualifications:

Sr.	Degree	Institution	Year
1.	PhD	Institute of Agricultural Sciences	1988
		Banaras Hindu University	
2.	M.Sc.(Ag)	Institute of Agricultural Sciences Banaras Hindu University	1982
3.	B.Sc. (Ag)	Institute of Agricultural Sciences Banaras Hindu University	1979
4.	I. Sc. (Ag)	U P Board, Allahabad	1976
5.	High School	U P Board, Allahabad	1974

4. Area of Specialization: (brief writeup) if any: Soil fertility & Plant nutrition/Soil Chemistry

Sulphur research in soils and crops

Boron research in soils and crops

Integrated nutrient management in rice

Soil testing and fertilizer recommendations

Liming to acid soils

Soil resource inventory for nutrient status

- 5. Contact Information: 0542-6701638 (O), 9450573736 (M) Email: <u>ssinghssac@yahoo.co.in</u>
- 6. Projects Undertaken as PI/ Co PI(if any):
 - ICAR, Project entitled "Evaluation of indigenous sources of sulphur for oilseeds and pulses in acidic red loam soils of Chotanagpur, Bihar" July 1993 to June 1996.
 - ICAR, Project entitled "Sulphur management of Niger crop in Bihar plateau for higher productivity" July 1997 to June 2000.
 - PPIC, Project entitled "Soil test based balance nutrients use for sustaining high crop yield", July 1997 to June 1999.
 - FAI, Project entitled "Balanced fertilization correcting sulphur deficiency in acid soils of Bihar plateau" June 1997 to May 1999.
 - ICAR, project on Soil Testing in farmers field of Bihar plateaut 1997 to 2000.
 - ICAR, project (NATP, RRPS-11) entitled "Integrated Plant Nutrient Management Strategies for Different Soil Moisture Regimes" (RRPS-11) from Aug., 1999 to August 2003.

As co-investigator

- ICAR, Project entitled "Increasing productivity through Boron Sulphur and Nitrogen nutrition in cauliflower" 1993 to 1997.
- PPIC, project entitled "sulphur fertilization in vegetable crops through 'SULFER-95' in red and lateritic soils of Bihar" (India) July 1997 to March 2003.
- ICAR, project entitled "Improvement in the nutritional profile of the tribal people in Ranchi district of Jharkhand" October 2002 July 2005.
- Borax Europe limited entitled "Evaluating the efficiency of boronated NPK (10:26:26) for increasing the productivity of rice based cropping systems in B deficient soils of Jharkhand" since Nov, 2003

- ICAR, project entitled " Integrated nutrient management in rice based cropping system in copper mines area of east Singhum (Jharkhand) for higher productivity "July, 2004 continuing.
- Jharkhand government' project on Soil testing entitled 'Assessment and mapping of some important soil parameters including soil acidity for the state of Jharkhand towards rational land use pattern' October 2004 continuing.
- Awards/ Recognitions (if any): Received Gold medal and citation on "Plant Nutrient sulphur" TSI FAI (The Sulphur Institute, Washington, DC Fertilizer Association of India) Bi-annual Award 1998 at <u>National level</u> on Sulphur research in soils and crops of Bihar plateau (Now Jharkhand state)
- 8. List of major Publications: (in order of importance)(if any) (Performances/ exhibitions in the case of Faculties of Performing Arts and Visual Arts)

04

Number of research paper published 68

Number of research abstract published 23

Number of Hindi articles published 12

Number of Bulletin published

Important published research paper(Appendix)

1. Singh, Surendra; Singh, A.P. and Singh, B (1991)Direct and residual effect of pyrites on yield, sulphur content

and quality characters of groundnut and mustard. J. Indian Soc. Soil Sci. 39, 327-331.

- 2 Singh, Surendra; Singh, A.P. and Singh, B (1991) Effect of Pyrites on yield, protein content and S uptake by chickpea grown in Entisol. *Journal of Research (BAU)* 3 (2) 195-196.
- 3 Singh, Surendra; Singh, A.P. and Singh B (1992) Direct and residual effect of pyrites on yield protein content and S uptake by blackgram and lentil in Entisols. J. Indian Soc. Soil Sci. 40, 584-585.*
- 4 Mahto, S.N; Singh, K.P; Singh, Surendra and Singh, B.P (1992) Total and available sulphur in some soils of Chotanagpur area of Bihar in relation to soil properties. J. Indian Soc. Soil Sci. 40, 846-847.
- 5 Singh, Surednra; Singh, K.P; Rana, N.K. and Sarkar, A.K (1993) Forms of sulphur in some Ranchi soils of Chotanagpur. J. Indian Soc. Soil Sci. 40, 562-563.
- 6 Singh, Surendra; Singh, K.P; Sarkar, A.K; Singh, B.P. and Gupta, B.P (1993) Release patterns of phosphorus from indigenous phosphatic sources in acid soil. J. Indian Soc. Soil Sci. 46, 774-775.
- 7 Singh, Surendra (1995) Critical limit of sulphur for Niger crop in sedentary soil. J. Indian Soc. Soil Sci. 43, 228-290.
- 8 Singh, Surendra; Singh, S.K; Singh, K.P. and Kumar Rakesh (1995) Status and forms of sulphur in upland and lowland soils of Santhal Parganas region of Bihar. J. Indian Soc. Soil Sci. 43, 682-684.
- 9 Singh, K.P; Singh, Surendra; Sarkar, A.K; Singh, K.P. and Kumar, Arvind (1996) Status and response of sulphur and micronutrients in soils of Bihar plateau for higher crop productivity. *Fertilizer News*, 41 (8) 41-47.
- 10 Singh, Surendra and Singh, K.P. (1996) Effect of gypsum on yield, oil content and luptake of Ca and S by groundnut grown on acid Alfisols of Ranchi. J. Indian Soc. Soil Sci. 44, 695-697.
- 11 Singh, Surendra; Singh, K.P. and Sarkar, A.K. (1996) Suitability of extractants and critical limits of sulphur in acidic soils for blackgram. J. Indian Soc. Soi. Sci. 44, 698-701.
- 12 Singh, Surendra; Singh, K.P and Sarkar, A.K. (1997) Oxidation of elemental sulphur and pyrites in acid sedentary soil Journal of Research, BAU (2) 1997-199.
- 13 Singh, Surendra; Singh, K.P; Singh, S.K. and Kumar Gautam (1998) Response of blackgram (*Phaseolus mungo*) to sulphur on acid Alfisol of Bihar plateau. J. Indian Soc. Soil Sci. 46, 257-260.
- 14 Singh, Surendra; Singh K.P and Sarkar A.K. (1998) Long term effect manures of fertilizers, and lime on sulphate adsorption in acid soil. *Journal of Research*, *BAU* 10 (1) 80-82.
- 15 Singh, Surendra; Singh, K.P; Sarkar, A.K. and Singh, S.K. (1998) Response of Indian mustard (*Brassica juncea*) and Black gram (Phaseolus mungo) grown in rotation to sulphur fertilization in acid soil. *Indian J. Agric. Sci.* 68 (7) : 341-343
- 16 Singh, Surendra and Sarkar, A.K. (1999) Response of oilseeds and pulses to indigenous sulphur sources in Bihar plateau. *Fertilizer News* 44 (7) pp 23-66.
- 17 Singh, Surendra and Sarkar, A.K. (1999) Status of plant available sulphur in soils of Gumla and Lohardaga districts of ChotanAgpur region. J. Indian Soc. Soil Sci. 47, 556-558.
- 18 Singh, Surendra; Sinha, S.K; Singh, R.N; Saha, P.B and Gupta, B.P. (2000) Yield, S uptake and oil content of niger as influenced by applied sulphur on acidic soils of Bihar plateau. *J.Indian Soc. Soil Sci.* 48, 121-124.
- 19 Sarkar, A.K; Singh, Surendra and Saha, P.B. (2000) Sulphur in balanced fertilization in red and lateritic soils of Chotanagpur plateau of *Bihar TSI/FAI/JFA*, New Delhi pp 65-72.

- 20 Singh, Surendra and Sarkar, A.K. (2001) Balanced use of major nutrients for sustaining higher productivity of maize-wheat cropping system in acidic soils of Jharkhand *Indian Journal of Agronomy* 46 (4) : 605-610.
- 21 Singh, Surendra; Singh, R.N; Prasad, Janardan and Kumar Binod (2002) Effect of green manuring, FYM and Biofertilizer in relation to fertilizer nitrogen on yield and major nutrient uptake by upland rice *J. Indian, Soc. Soil Sci.* 50 (3) 313-314.
- 22 Singh, R. N; Kumar, Binod; Prasad, N.K and Singh Surendra (2002) Effect of lime and boron application to maize (Zeas mays) gram (Cicer arietinum) sequence in soil of Jharkhand Indian journal of Agricultural Sciences 72 (6) : 346-47.
- 23 Kumar, Rakesh; Singh K.P and Singh, Surendra (2002) Vertical distribution of sulphur fractions and their relationships among carbon, nitrogen and sulphur in acidic soils of Jharkhand J. Indian, Soc. Soil Sci. 50 (4) 502-505.
- 24 Sarkar, A.K and Singh, Surendra (2003) Crop reponse of secondary and micronutrients in acidic soils of India *Ferilizer news* 48 (4) 47-54.
- 25 Singh, Surendra; Sarkar, A.K; Singh, B.P and Singh R.N. (2003) plant status and response of niger to sulphur in acidic soils of Jharkhand . *Fertlizer news* 48 (10) 57-61
- 26 Kumar, Rakesh; Singh K. P; Sarkar, A.K; Wadood. A and Singh, Surendra (2003) Sulphate sorption and desorption characteristics of Alfisol J. Indian, Soc. Soil Sci.4, 512-517.
- 27 Singh, Surendra (2003) Review and refinement of fertilizer recommendation for oil seeds in Review and refinement of fertilizer recommendation for major crops of Jharkhand Page. No. 43-49.
- 28 Kumar, Rakesh; Wadood, A ; Singh, Surendra and Thankaman, C.K. (2004) Suitability of different potassium availability indices for maize in acid Alfisols of Chotanagpur in Jharkhand J. Indian, Soc. Soil Sci. 52 (3), 280-282.
- 29 Singh, R. N; Kumar, Binod and Singh, Surendra (2004) Effect of lime and boron application on gram (Cicer arietinum) in acid soils of Jharkhand J. Indian, Soc. Soil Sci. 52 (3), 283-285.*
- 30. ar, Dibyendu; Mandal, Biawapati; Sarkar, A.K; **Singh, Surendra**; Jena, D; Patra, D.P. and Phillips, Martin (2006). Performance of boronated NPK in B deficient soils. Indian Journal of fertilizers 1 (12) pp. 57-59.
- 31. Singh, Surendra; Singh, R. N.; Prasad, Janardan and Singh, B.P (2006) Effect of integrated nutrient management on yield of and major nutrient uptake by rice and soil fertility in rainfed uplands. *Journal of Indian Society of Soil Science*. 54 : (3) 327-330.
- 32. Singh, R. N., **Singh, Surendra** and Kumar, Binod (2006) Interaction effect of sulphur and boron on yields, nutrient uptake and quality characters of Soybean (*Glycine max L. Meill*) grown in acidic upland soil *Journal of Indian Society of Soil Science*.54: (4) 516-518.
- 33. Agarwal, B. K, Kumar Binod., **Singh, Surendra**; Singh, R. N. Sinha, Asha, Kumari (2007). Effect of phosphorus and liming on yield , phosphorus uptake and protein content of P in acidic uplands soils of east Singhbhum *Journal of Indian Society of Soil Science*.55: (3) 364-366.
- 34. Maurya, B. R. Shahab, Azami, Singh, A.P and **Singh, Surendra** (2007) Effect of potassium on growth of Aspergillus niger. *Journal of Research, BAU* 19 (2) :159 -162.
- 35. Singh, Surendra, Singh, R. N. ;Singh, B. P. and Kushwaha, Azit Kumar (2008). Integrated nutrient management practices for sustainable productivity of rainfed rice Indian Journal of fertilizers 4 (3) pp. 25-28&31-32.
- 36. Kushwaha, Ajit Kumar; **Singh, Surendra** and Singh, R.N.(2009) Available nutrients and response of lentil to boron application in rainfed uplands soils of Ranchi. *Journal of Indian Society of Soil Science*.57: (2) 219-222.
- 37. **Singh, Surendra**; Singh, R.N., Sarkar, A.K. and Shiv Shankar Prasad (2010) INM for higher productivity of Rice-Pea cropping system-An experience from copper mines area. Indian Journal of fertilizers, 6 (2), pp 43-46&58.
- 9. Additional Information/ Achievements (if any):

National seminar symposia attended: 23

International conference attended: 01

Major advisor (Thesis) : M.Sc (Ag) - 7 ; Ph.D. - 1

Co-advisor (Thesis) : M.Sc (Ag) - 25 ; Ph.D. - 5

Extension activities : Radio / Television talks - 25

conservation at RGSC, Barkachha, Mirzapur since 2008

Books:

 Sulphur Research in Soils and Crops of Bihar plateau . SSAC (BAU) Res., Bull. No. 1/2000
 Soils of Jharkhand (Their characteristics and management) SSAC /(BAU) Tech., Bull No. 1/2003
 Integrated Nutrient Management practices for crops SSAC (BAU) Tech. Bull No.1 /2004
 Diagnostic Techniques for plant nutrients SSAC (BAU) Tech. Bull No.1 /2006

Course coordinator: M. Sc. (Ag), soil and water