

Ramabhau T. Patil

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B. Tech (AE), Mahatma Phule Agricultural University, Rahuri, India-1977

M. Tech (CPE) Indian Institute of Technology, Kharagpur, India-1979

Ph.D. University of Saskatchewan, Canada-1995

Additional training in India and/or abroad

Organization	Subject/Topic	Duration of course
USAID	Advance training Extrusion cooking technology" at Colorado State University, Ft. Collins, USA	Oct. to Dec. during 1986
USAID	Rapid Hydration Hydrothermal Cooking of Soy milk" at Kansas State University, USA	Jan 1987
Indian Agricultural Research Institute, New Delhi	Entrepreneurship development programme in Agriculture	1997-1998 Dec. 16-31, 1997 Jan. 8-30, 1999 (10 days)
NAARM, Hyderabad	Senior level course at National Academy for Agricultural research Management, Hyderabad	1999
Goldameir Mount Carmel, International training Centre, Hafia, Israel	International Training Course on Entrepreneurship and Small Business Management in Rural Sector	July 1-12, 2003
NATP-ICAR	Multimedia as an educational tool	July 10-20, 2003

Special Assignment (International organizations, overseas and special national assignments).

A member of the team to survey the status of pulse milling technology around the world by Canadian Pulse Growers Association (1995)
Member Secretary, QRT of AICRP on processing, Handling and Storage of jaggery and Khandsari (Natural sweeteners) (1997)
Member Secretary, QRT of AICRP on processing, Handling and Storage of jaggery and Khandsari (Natural sweeteners) (2003)
Director, Process & Food Engg. Indian Society of Agricultural Engineers (1998-2000)
Vice President (Activity Council) Indian Society of Agricultural Engineers (2000-2002)
Vice President (Activity Council) Indian Society of Agricultural Engineers (2002-2004)
Founder Editor of ISAE Electronic News Letter (2003)
Invited speaker at International Soybean Processing and Utilization Conference, IV International Soybean Processing and Utilization Conference, Foz do Iguassu, Brazil, February 29 to March 5, 2004

Major contribution to Profession

Equipment Developed

1	Solar Cabinet Dryer for Plantation Crops
2	Small Holders Dryer for Plantation Crops Using Agril. Waste as Fuel
3	Low Cost Polyethylene Solar Dryer
4	Improved Tray Type Mechanical Copra Dryer
5	Soybean Flaking Machine
6	Soybean Blanching Unit
7	Natural Convection Tray Type Dryer Using Agril. Waste as Fuel
8	Wet Grinder
9	Multipurpose Dryer for Soybean and Its Products
10	Low Cost Forming Extruder

11	Wet Dehuller for Soybean
12	Helped in development of dural forage pellet tester (At U of S Saskatoon)
13	Hand operated paneer pressing devices
14	Hand operated destoner
15	Low cost deep fat fryer using thermic fluid

Processes Developed

1	Propionic Acid Treatment for Preservation of Wet Coconut Kernel
2	Process for Making Edible Quality Flakes From Soybean
3	Process for Making Soybean Badi (Nuggets)
4	Process for Making Soy fortified Extruded Flakes
5	Developed time temperature moisture during fractional drying of alfalfa component parts and quality standards for densified alfalfa products.

Pilot plant facilities developed

1	Extrusion expelling pilot plant for medium fat soy flour and organic oil
2	Pilot plant for production of soy ice cream
3	Pilot plant equipment for production of soy flakes and the same are being used for production of full fat soyflour

Human Resource/Entrepreneurship Development

Course Coordinator for Entrepreneurship Development Program on "Production of soymilk and soypaneer" at Soybean Processing and Utilization Centre since December 1996. So far conducted 40 trainings, trained 411 candidates and about 40% of them have started their own enterprise

C Externally funds projects

S. No.	Name/s of the Projects	Cost of the Projects (Rs.)	Funding Agency	Duration of year	Whether worked as PI/Co-PI/as RMP
1	Installation and Commissioning of Takai Tofu plant	INR 75000	NRC for Soybean, Indore under UNDP funds	3 months	PI
2	Project development and provide technical inputs to set up a factory for production of India mix for GS Roller Flour Mills, Bina MP	INR 100000	M/s GS Roller Flour Mills Pvt. Ltd., 188, Pul Bogda, Jinsi, Bhopal-20	3 months	PI
3	Awareness camp for establishment of soy based agro industries	INR 8810	EDII, Lucknow for Betul District	1 month	PI
4	Awareness camp for establishment of soy based agro industries	INR 8810	EDII, Lucknow for Betul District	1 month	PI
5	Jai Vigyan NATP Project Household Food and Nutritional Security through Value Addition and Post Harvest Management	INR 14.5 Million	NATP-ICAR (World Bank Funded)	4 years	PI

6	Development of novel value added (nutritionally enhanced) foods from potatoes using twin screw extrusion technology	US\$30,000/yr	Washington Potato Commission	3 years	Team member
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Symposia/Seminars/Summer/Winter Institutes, Refresher Courses, trainings organized as organizer/course director

S. No.	Name of the Summer Institute/ Course or related issue	Duration (with dates)	As
1	Winter School in Production of Soybean Based Foods & Their Quality Assurance	Sept 12 to Oct 04, 1997	As Co-Course Director
2	One day interaction meeting of Experts and CCPI's for Post Harvest technologies suitable for Tribal Hilly and Backward area	May, 2000	Organizer
3	Six day Entrepreneurship development Programme for upcoming entrepreneurs on Production of soymilk and paneer	38 courses	Coordinator
4	Interaction meeting of soybean entrepreneurs with Dr. (Ms) Hea-Ran Lee Ashraf USA	17.4.2002	Convener
5	One Day Flour Miller's Meet	May 24, 2001	Organizer
6	Winter School in Value Addition and Enterprise Development based on Soybean	Sept 1-30, 2003	Course Director

Honors and Awards

Sl. No.	Name of the award	Awarding institute	Year	Topic (if any)
1	ISAE Memento	Indian Society of Agricultural Engineers	1998	For active participation in organization of 32 nd ISAE Convention at CIAE Bhopal
2	Best Paper Award (Poster)	Indian Society of Agricultural Engineers	1998	Paper on establishing rural industries based on soybean (First Author)
3	Best Paper Award (Poster)	Indian Society of Agricultural Engineers	2002	Paper on development of technology for soy nuts (Co-Author)
4	Best Paper Award (Poster)	Association of Food Scientists and Technologists	1990	Paper on development of 5 roller flaking machine (First Author)
5	Best Paper Award (Poster)	Association of Food Scientists and Technologists	2000	Paper on technology for extrusion expelling of soybean (First Author)
6	Team Award	Government of Poland	1997	For contribution to the book on thermal processing of bio materials published in Poland
7	Best Graduate Thesis Award	Canadian Society of Agricultural Engineers	1996	For my Ph.D thesis
8	Award of graduate scholarship	University of Saskatchewan	1991-1995	For Ph.D studies
9	Award of Gold Medal (Bansilal M Dayama Medal)	Mahatma Phule Agricultural University	1977	For standing first in B. Tech. Course
10	Award of set of books	Indian Council of Agricultural Research	1977	For standing first in B. Tech. Course

11	ICAR fellowship for post graduate studies	Indian Council of Agricultural Research	1977	Not Availed
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Books/Bulletins

Sl. No.	Name of the author	Title of the Book	Publisher	Year
1	Eds. R.P. Kachru, B.S. Bisht and R.T. Patil,	Storage of Durables and Semi Perishables	C I A E, Bhopal, INDIA	1985
2	Patil R. T. and S. J. K. Annamalai	Small holders dryer for plantation crops using agricultural waste as fuel. Tech. Bull. 13.	CPCRI, Kasaragod	1986
3	Patil R. T. and S. J. K. Annamalai	Solar and electrical copra dryers. Tech. Bull. 15	CPCRI, Kasaragod	1986
4	S. Sokhansanj and R. T. Patil.	Dehulling and splitting of pulses (Peas and Lentils). A report submitted to Agricultural Development Fund	Saskatchewan Agriculture and Food based on study tour to India and Europe	1995
5	Patil R. T. and S. Sokhansanj	A bibliography on pulse processing.	Dept of Agric. & Bioresource Engineering, University of Saskatchewan, Saskatoon	1995
6	Gandhi A.P. and R.T. Patil Eds	A Course Manual of Winter School in Production of Soybean Based Foods & Their Quality Assurance	Central Institute of Agricultural Engineering, Bhopal	1997
7	AC Saxena, D Saraswat, RT Patil ,KM Sahay and PK Das Eds	A Course Manual for short course on Production Development and manufacturing technology of PHT Machines	Central Institute of Agricultural Engineering, Bhopal	1997
8	Patil R. T. and Nawab Ali Eds	A Course Manual for 6 day Entrepreneurship development course on Production of soymilk and soypaneer	Central Institute of Agricultural Engineering, Bhopal	2000
9	Patil R. T.	Harvest and Post Harvest Technology of Plantation and Spice Crops”, In Advances in Horticulture Vol 10. Plantation and Spice Crops Eds. K. L. Chadha and P. Rethinam (1994)	Malhotra Publishing House, New Delhi	1994
10	R. T. Patil and S. Sokhansanj	Contributed a sub-chapter in “Thermal Processing of Bio Materials”	CANMET, Energy Diversification Research Laboratory, Varennes, Quebec, Canada	1995
11	S. Sokhansanj and R. T. Patil	Contributed a chapter in Progress in Drying Technologies (Eds Mujumdar and Kudra) on “Dehydration kinetics of green alfalfa”	International Journal of Drying Technology	1995

12	Patil, R.T. and Sokhansanj, S.	Contributed chapter - Physical Properties and Drying of Alfalfa	<i>Drying Technology in Agriculture and Food Science</i> , ed. A. S. Mujumdar, Science Publishers, Inc., Enfield, NH, 191-210.	2000
12	Sokhansanj and R. T. Patil	Chapter on Dehulling and splitting of pulses	Handbook of Post Harvest Technology	2003
13	R. T. Patil and L. K. Sinha Eds.	Value Addition and Enterprise Development based on Soybean”	C I A E, Bhopal	2003
14	Patil R.T. and Nawab Ali	Leaflet for product promotion on Full Fat Soyflour, Soymilk and paneer and soy fortified biscuits	CIAE Bhopal	2000
15	Patil R. T. , L. K. Sinha and Neerja Lalan	Course manual for women training on “Preparation of nutritious recipes from soybean”	CIAE, Bhopal	2003

8 Publications

Total numbers of Publications – 142		
(I)	Full length paper in referred scientific/professional journal	46
(II)	Research short note/seminar/short communication/ symposia paper/ popular articles/ books chapter/technical journals	96
(III)	Book published/ authored or edited individually OR Jointly (Please give details)	5
(IV)	Manuals/ teaching aids developed	5
(V)	Research bulletins/extension bulletins/ extension leaflets	6

Reviewer for the journals

1. **Journal of Food Science and Technology (I)**
2. **Journal of Agricultural Engineering (I)**
3. **Journal of Science of the Food and Agriculture**
4. **Journal of Food Processing and Preservation**
5. **International Journal of Food Properties**
6. **CIGR ejournal**

Ph D thesis examiner:

Aligarh Muslim University, Aligarh, India; Indian Agricultural Research Institute, New Delhi

7. LIST OF PUBLICATIONS

A) Publications in refereed journals

1. Patil, R.T., Bal, S. and R.K. Mukherjee, 1978 [Drying constants of traditionally parboiled and conventionally parboiled paddy](#). RPEC Reporter Vol. 4, No. 2 : 27-28
2. Patil, R. T. and C. K. B. Nambiar. 1982. [Sun drying of copra](#), J. of Plantation Crops, 10 (1) : P 26-29
3. Patil, R. T., Bal, S., and R. K. Mukherjee. 1982. [Effect of parboiling treatment on rice quality characters](#), J. of Agril. Engg. Vol. XIX No., P 391-399
4. Patil, R. T. 1983. [Small holders copra dryer using agril waste as fuel](#), Oleagineux, France, 30 (10) : P 561-562
5. Patil, R. T. and Jaswant Singh. 1983. [Development of improved tray type mechanical copra dryer](#), Oleagineux, France, 39 (1):31-37
6. Patil, R. T. 1984. [Design and development of solar copra dryers](#), Agril Mechanization in Asia, Africa and Latin America, Japan Vol. XV, No. 2 : 59-62
7. Patil, R. T. 1985. [Copra drying process and equipment - a review](#), J. of Plantation Crops, 13(2):78-87
8. Patil, R. T. and B. D. Shukla. 1988. [Natural convection tray type batch dryer using agril waste as fuel](#), International J. of Drying Technology, USA. 6 (2): P 195-212
9. Patil, R. T. 1987. [Cardamom processing in south India](#), Agril Mechanization in Asia, Africa and Latin America, Japan, Vol. 18 (2):55-58
10. Patil, R. T., Shukla, B. D. and A. P. Gandhi. 1987. [Development of low cost soybean blanching unit using wood chips as fuel](#), Energy in Agriculture, Netherlands 6: 255-263
11. Annamalai S. J. K., K. Narayanswamy and R. T. Patil. 1987. [Design and development of a natural convection type low cost dryer for medium holders](#), J. of Plantation Crops, Suppl. P 81-90
12. Patil, R. T. and B. D. Shukla. 1988. [Flaking machine for cereals and pulses](#), J. Appropriate Technology, U.K., Vol 14(4):6-7
13. Patil, R. T. 1988. [Drying studies on arecanut \(A. Catechu Linn\)](#), J. of Food Sci. and Technol.(I) 26(2):106-107
14. Kachru, R. P., Shrivastava, P. K. and R. T. Patil. 1988. [Post harvest operations for tree spices](#), Spice India, J. of Spice Board, Cochin, INDIA Vol. 2 No. 11 &12: 5-8 & 13-17
15. Kachru, R. P., Shrivastava, P. K. and R. T. Patil., 1988. [Post harvest aspect of cardamom](#), Cardamom, June : 7-18
16. Kachru, R. P., Patil, R. T. and P. K. Shrivastava. 1988. [Post harvest technology of pepper](#), Spice India, J. of Spice Board, Cochin, INDIA. Vol. 3 No. 8: 12-16
17. Patil, R. T. 1988. [Drying studies on black pepper \(Piper nigrum L\)](#), J. of Food Sci. and Technol. 26(4):
18. Annamalai S. J. K., Patil, R. T. and T. D. John. 1988. [Improved curing methods for large cardamom](#). Spices India.1 (4): 5-10
19. Patil, R. T. and Nawab Ali. 1989. [Soybean a potential raw material for rural food industries](#), Productivity, Vol. 30 No. 4: 427-434
20. Patil, R. T. and Nawab Ali. 1989. [Low cost wet grinder for soybean](#). Rural Technology Journal, Vol. 6 No. 3 : 12-18
21. Annamalai S. J. K., Narayanswamy K. G. and R. T. Patil. 1989. [Design and development of a natural convection type low cost dryer for medium holdings](#). J. of Plantation Crops 16(Suppl) : 81-90.
22. Patil, R. T. and Nawab Ali. 1990. [A low cost technology for making soybean badi at rural /cottage level](#), Ind. J. of Nutri. and Dietics, Coimbtore, INDIA Vol 26 : 233-238.
23. Patil, R. T., B. D. Shukla and AP Gandhi. 1990. [Development of process and equipment for soyflakes in India's rural areas](#), Agril Mechanization in Asia, Africa and Latin America, Japan, Vol. 21, No. 2: 65-70
24. Patil, R. T. and B. D. Shukla. 1990. [Studies on open sun drying of blanched soybean](#). J. of Food Sci. and Technol.(I), 27(2): 116-118
25. Patil, R. T., Singh, D. S., and R. E. Tribelhorn. 1990. [Effect of processing conditions on extrusion cooking of soy rice blend with a dry extrusion cooker](#), J. of Food Sci. and Technol.(I),27(6): 376-378
26. Shukla, B. D. and R. T. Patil. 1990. [Production of soyflakes at rural level](#), Productivity, Vol. 31 No 3 Oct -Dec 1990:387-397
27. Patil, R. T. and Nawab Ali. 1991. [Development of low cost extruder for soyproducts](#), Journal of Rural Technology, March 1991: 13-18

28. Patil, R. T., Jaswant Singh and P. C. Bargale. 1991. [Development of wet dehuller for blanched soybean](#), J. Fd. Sci. Technol. Vol 28, No. 4: 234-236.
29. Patil R.T., S. Sokhansanj, E. A. Arinze and G.J. Schoenau 1992. [Thin layer drying of components of fresh alfalfa](#). Canadian Agricultural Engineering 34(4):343-346.
30. Shukla B. D. and R. T. Patil. 1992. [Dryers and drying technology for food crops- Research review](#). Indian Journal of Agricultural Sciences 62 (9) : 579-89
31. Patil, R. T., Sokhansanj, S., Arinze, E. A. and G. J. Schoenau. 1993. [Methods of expediting drying rates of alfalfa stems](#), Transactions of The ASAE Vol 36(6): 1799-1803
32. Thakor, N. J., Sokhansanj, S., Patil, R. T. and S. D. Deshpande. 1995. [Moisture sorption and volumetric changes of canola during hydrothermal processing](#). J. of Food Process Engineering, USA.18(3):233-242
33. Larsen, T. A., Sokhansanj, S., Patil, R. T. and W. J. Crerar. 1995. [Breakage susceptibility of alfalfa and feed pellets](#). Canadian Agricultural Engineering. 38(1):21-25
34. Patil, R. T., Sokhansanj, S., Khostghaza M. H. and L. G. Tabil Jr. 1996. [Compression characteristics of alfalfa cubes](#). Canadian Agricultural Engineering. 38(3):21-25
35. Sokhansanj, S. and Patil, R. T. 1996. [Kinetics of dehydration of green alfalfa](#). Drying Technology an International Journal 14(5): 1197-1234
36. Patil, R. T. and Nawab Ali, 1999 [Crushing characteristics of mustard with commercial oil expeller](#), J of Food Sci. & Technol. 36(5): 408-412
37. Sinha, S., S. Sokhansanj, W.J. Crerar, W. Yang, L.G. Tabil, M.H. Khoshtaghaza, R.T. Patil. 2000. [Mechanical dewatering of chopped alfalfa using an experimental piston-cylinder assembly](#). Canadian Agricultural Engineering. 42(3): 153-156.
38. Patil R.T., Joshi K.C. Gupta S. and A. Saran 2000 [Extrusion cooking characteristics of soy-wheat blends to produce ready to eat snacks](#). Journal of Agricultural Engineering (ISAE), 37(3): P11-19.
39. Patil, R. T., Krishna Jha, Jaswant Singh and P. C. Bargale, 2001. [Testing of convective type cylindrical dryer for production of instant soy dosa mix](#), J of Food Sci. & Technol. 38(2): 111-115
40. Neerja Lalan, Patil R.T., L. K. Sinha, and PK Baig 2003 [Training needs and effectiveness of training imparted to the farmwomen of Bhopal district regarding preparation of nutritious soy based food products at domestic level](#). Journal of Dairying, Foods and Home Science, 22(1):74-76, 2003.
41. Tabil L.G., Jr., S. Sokhansanj, W.J. Crerar, R.T. Patil, M.H. Khoshtaghaza and A. Opoku. 2002. [Physical characterization of alfalfa cubes: I. Hardness](#). Canadian Biosystems Engineering 44:3.55-3.63
42. Patil R. T. and Nawab Ali. 2005 [Effect of pre-treatments on mechanical oil expression of soybean using commecial oil expeller](#). International Journal of Food Properties (In press)
43. Patil R. T., L. K. Sinha, Sheetal Wagh, S. Patel and V. Kalambarkar. 2005. [Extrusion characteristics of kutki - a little millet \(*Panicum sumatrense*\)](#) International Journal of Agricultural Engineering, 14 (3): 101-108
44. Patil R. T., L. K. Sinha, Sheetal Wagh, S. Patel and V. Kalambarkar. 2005. [Extrusion characteristics of Kodo Millet \(*Paspalum scrobilatum L*\)-a nutri-cereal](#), J. of Food Engineering (under review)
45. Goyal B., L.K. Sinha and R.T. Patil. 2004 [Studies on extrusion cooking of soy millets for ready-to-eat and supplementary foods](#). Beverage and Food World, May Issue
46. Patil R. T. and B. D. Shukla. 2005. [A novel design of crop dryer for use in developing countries](#). Accepted for publication in the International Journal of drying technology.
47. Patil R. 2004. [Food process design-a book review](#). Journal of Food Processing & Preservation, 28 (6):491-492

B) Publications in technical journals/proceedings

1. Patil, R. T. 1980. [Use of propionic acid for preservation of coconut kernel](#). In the Proceedings of the PLACROSYM III Cochin, INDIA : P 173 – 179
2. Patil, R. T., Nelliath, E. V. and T. K. Balkrishnan. 1980. [Evaluation of weather data for drying and storage of copra](#). In the Proceedings of the PLACROSYM III Cochin, INDIA : P 221-223
3. Patil, R. T. 1982. [Design and development of small holders copra dryer using agril. waste as a source of energy](#), In the Proceedings of PLACROSYM V. CPCRI, Kasaragod, INDIA : P324-334
4. Patil, R. T. and C. K. B. Nambiar. 1982. [Copra drying with solar energy](#), Feature Article in COCONIS, Srilanka 9 : 6-9
5. Patil, R. T. 1982. [Small holders copra dryer using agril waste as fuel](#), COCONIS, Srilanka 10 : P 3-4

6. Patil, R. T. 1983. [Designing solar dryer for drying agril produce](#). Agril Engg Today (I. S. A. E.) Vol. 17 No. 5: P 3-7
7. Patil, R. T. 1984. [Dry processing of coconut, in the proceedings of the seminar on coconut processing and utilization](#), Held at RRL Trivandrum, INDIA on 8th Feb 1984 : P 28-38
8. Patil, R. T. 1984. [Problems and prospects of potato storage](#). In Storage of Durables and Semi Perishables, Eds. Kachru, Bisht and Patil, CIAE Bhopal, INDIA: P 130-133
9. Patil, R. T. and Nawab Ali. 1985. [Performance evaluation of a hand grinder for dehulling soybean](#), In the Proceedings of the SJC of the ISAE Vol 3 : PII 177-183
10. Patil, R. T., Gandhi, A. P. and S. P. Agrawala 1985. [Water absorption characteristics of soybean](#), In Proceedings of the SJC of the ISAE Vol 3: PII 170-173
11. Patil, R. T., Bal, S., and R. K. Mukherjee 1985. [Effect of parboiling on the storability of rice bran](#), In the Proceeding of the SJC of the ISAE Vol. 3 : PI 65-68
12. Gandhi, A. P., Patil, R. T. and Nawab Ali. 1985. [Soybean - an answer to hunger](#), Farmers Journal, Oct: 35-39
13. Patil, R. T. and Shukla, B. D. 1986. [Low cost technology for making soyflakes at rural level](#), Proceedings of the National Seminar on Soybean Processing and Utilisation, CIAE, Bhopal, INDIA: P 253-268
14. Nawab Ali and R. T. Patil 1986. [Extrusion process with special reference to soybean](#), In the Proceedings of the National Seminar on Soybean Processing and Utilisation, CIAE Bhopal, INDIA: P269-279
15. Patil, R. T. 1986. [Some practical aspects of drying agril produce](#), A Lecture Note for IDRC Training Program on Sorghum Processing and Utilisation, held at CIAE, Bhopal, INDIA, In Proceedings Eds. Shukla and Biswas: 195-202
16. Patil R. T. 1987. [Solar cabinet copra dryer](#), Food Digest, Vol. 10 No. 4 Oct- Dec. 166-168
17. Patil, R. T. 1988. [Status of post harvest technology of coconut](#), In the Proceedings of the National Seminar on Coconut Breeding and Management, KAU, Trichur, INDIA
18. Shukla, B. D. and R. T. Patil. 1988. [Overview of grain drying and storage problems in India](#), GASGA Executive Seminar Series No. 2, Australia : 7-27
19. Patil, R. T. and B. D. Shukla. 1988. [Low cost roller flaking machine for cereals and pulses](#), Invention Intelligence, 24(9): 424-425
20. Patil, R. T. and B. D. Shukla 1988. [Low cost tray dryer for food products](#), Invention Intelligence, 24(12): 567-568
21. Gandhi, A. P., Patil, R. T. and Nawab Ali 1989. [Low cost devices for production of soy-paneer at rural level](#), Invention Intelligence, 24(6); 276-279
22. Patil, R. T. 1989. [Solar cabinet dryer for plantation crops](#), Science Reporter, 26(1) : 64-65
23. Patil, R. T. and Nawab Ali. 1989. [Prospects of small scale soyfood industry based on dry extrusion technology](#), In Proceedings of the National Seminar on Role of Machines for Maximising Agril Production, R.A.U., Bihar, INDIA : P124-129
24. Patil, R. T. and B. D. Shukla 1989. [Development of multipurpose dryer for soybean and its production](#), In the Proceedings of the National Seminar on Role of Machines for Maximising Agril Production, R.A.U. Bihar, INDIA, : 130-139
25. Patil, R. T., Shukla, B. D. and A. P. Gandhi 1989. [Low cost blanching unit for soybean](#), Invention Intelligence, 24(8): 378-379
26. Patil, R. T. 1989. [Small holders dryer for plantation crops](#), Science Reporter, 26 (2): 106-107
27. Patil, R. T. 1990. [A do it yourself type domestic solar dryer](#), Invention Intelligence, 25 (2): 81-82
28. Shukla, B. D. and R. T. Patil 1990. [Recent developments in engineering of food grain storage in India](#), Proceedings of 5 th International Working Conference on Stored Product Protection, France, Sept. 9-11
29. Patil, R. T. and Nawab Ali. 1990. [Extrusion processing of soymeal for food uses](#), Agricultural Engineering Today, Vol. 13 No. 3,4 :12-18
30. Patil, R. T. and Nawab Ali. 1990. [Development of low cost technology for the production of soy chunk and snacks at rural level](#), In the proceedings of the International Agricultural Engineering Conference and Exhibition, Held at Bangkok, Thailand, 3-6 Dec.
31. Sokhansanj, S., Arinze, E. A., Schoenau, G. J. and R. T. Patil 1992. [Experimental and computer simulation of solar heated and natural air drying systems](#). In the proceedings of Second World Renewable Energy Congress, U K.
32. Patil, R. T., Sokhansanj, S. 1992. [Drying rates of alfalfa component parts](#). In the proceedings of International drying symposium - Drying '92, Montreal, Canada : 1850 – 1857

33. Sokhansanj S. and R. T. Patil 1992. [Future considerations in forage processing](#), In the proceedings of 13th Annual Canadian Dehydrators Association Conference and Trade show, Vancouver, 18-20 November : 87-101
34. Patil R. T. and S. Sokhansanj 1993. [Stress relaxation characteristics of alfalfa cubes](#). (In the proceedings of International Conference on Food Process Engineering at Chiba, Japan) In Developments in Food Engineering (Eds T. Yano et al.) Blackie Academic & Professional, An imprint of Chapman & Hal, Tokyo: 84-86.
35. Patil R. T., Sokhansanj S. and T. Larsen. 1994. [Effect of drying of alfalfa chop on color preservation](#). Drying '94 (Eds V. Rudolph & R. B. Keey) : 1037-1044
36. Sokhansanj S., R. T. Patil, Lope Tabil Jr., W. Yang, E. A. Arinze, W. J. Crerar, D. S. Pshyk, T. B. Larsen and M. H. Khoshtaghaza. 1994. [Effect of Process Conditions on Quality Changes in Alfalfa and its Products](#). In the proceedings of the Technical Conference on "Recent Advances in Alfalfa Harvesting, Processing and handling":
37. R.T. Patil. S. Sokhansanj and L.G. Tabil Jr., 1997. [Effect of drying air temperature on the color of dried alfalfa meal](#) Inter American Drying Conference Proceedings, editors: M.A. Silva, S.C.S. Rocha Itu-SP, Brazil, 1997 543-552
38. R. T. Patil 1998. [Solar drying experiences in India](#). An invited paper for presentation in International Workshop on Solar Drying Technology for Every Day Use, held at Dhaka, Bangladesh during Jan 10-11, 1998 (Published in the proceedings)
39. Nawab Ali, AP Gandhi and R. T. Patil 1998. [Soybean processing technologies and equipment suitable for rural level](#). Presented in one day seminar on Scope of Horticulture, Agroforestry and Food Processing Industries in Betul District on 22.10.97 (In Hindi published in the proceedings)
40. Patil R. T. and Nawab Ali 1998. [Soya Ahar](#), Krishak Jagriti, Vol 1 No.1
41. Patil R. T. 1998 [Status of agricultural process engineering and future plans for its development](#). Souvnr, Indian Society of Agricultural Engineers, Published on the occasion of 33rd annual convention during Sept. 21-23, P 54-58
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