

**Rao C N (RCN) Rachaputi**  
**A/Prof and Principal Research Fellow**  
**Centre for Plant Sciences,**  
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## 1. PROFESSIONAL HISTORY

Dates	Position	Institution/Employer
2016-present	A/Prof, Principal Research Fellow, Centre for Plant Science	Queensland Alliance for Agriculture and Food Innovation The University of Queensland
2010-2016	Senior Research Fellow, Team Leader Pulses, Centre for Plant Science	Queensland Alliance for Agriculture and Food Innovation The University of Queensland
2009-2010	Senior Principal Crop Physiologist (PO6)	Department of Agriculture & Fisheries, Queensland
2002-2008	Principal Crop Physiologist (PO5)	Department of Agriculture & Fisheries, Queensland
1999-2001	Senior Research Scientist (PO4)	Department of Agriculture & Fisheries, Queensland
1997-1999	Senior Research Management (Level V)	Intl. Crops Res. Ins. for the Semi-Arid Tropics (ICRISAT), India
1995-1997	Senior Research Scientist (Level IV)	Intl. Crops Res. Ins. for the Semi-Arid Tropics (ICRISAT), India
1992-1994	Research Scientist (Level III)	Intl. Crops Res. Ins. for the Semi-Arid Tropics (ICRISAT), India
1986-1991	Research Scientist (Level II)	Intl. Crops Res. Ins. for the Semi-Arid Tropics (ICRISAT), India
1981-1985	Research Scientist (Level I)	Intl. Crops Res. Ins. for the Semi-Arid Tropics (ICRISAT), India
1980-1981	Junior Crop Physiologist	Andhra Pradesh Agricultural University, India

## 2. EDUCATION & QUALIFICATIONS

### 2.1 Qualifications, Awards, Memberships

	Year	Qualification	Institution (if relevant)
Academic Qualifications	1980	Ph.D (Crop Physiology)	Univ. Agri. Sciences, India
	1975	M.Sc (Agricultural Botany)	Jawaharlal Nehru Krishi Vishwa Vidyalaya (JNKVV) India
	1971	B.Sc (Agriculture)	Andhra Pradesh Agri.Uni. (APAU), India

## ***Dr Rao C N Rachaputi -Publications***

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### **Summary**

- A total of 205 Publications (exluding Theses)
  - Co-editor of a book
  - 14 Book chapters
  - 5 Scientific editing
  - 68 Peer reviewed journal articles
  - 10 News Lettes and Information products
  - 64 Peer reviewed abstracts/conference papers / Technical reports
  - 43 Non-refereed conference abstracts, posters and major techincal reports

### **Completed post-graduate students research - Theses**

1. Jayanthi, S. 1984 Effect of Water Deficit on Seed Quality and Oil Composition in Groundnut (*Arachis hypogaea* L.). Thesis submitted to Acharya N.G. Ranga Agricultural University, Rajendranager, Hyderabad, India, for M.Sc (Ag).
2. Hebbar, K.B. 1988. Genotypic Variation in Recovery Response Following Release of Mid-saeson Drought in Groundnut. Thesis submitted to University Agricultural Sciences, Bangalore, India, for M.Sc (Ag).
3. Andrew Bickerdike, Laurance Desreumaux, and Rowen Markie 1995. Water relations, Phenology and Growth studies on Groundnut under Water Deficit Conditions. Dissertations of the three graduate students submitted to University of Nottingham, U.K. as partial fulfilment of the graduate research program.
4. V.Jayalaxmi 1996. Inheritance of Specific Leaf Area in Groundnut. Thesis submitted to Acharya N.G. Ranga Agricultural University, Rajendranagar, Hyderabad, India, for Ph.D.
5. K. Sailaza. 1998. Role of Beatines in Alleviation of Abiotic Stresses in Groundnut. Thesis submitted to Acharya N.G. Ranga Agricultural University, Rajendranagar, Hyderabad, India, for Ph.D.
6. Manohar Bhukta. 1998 Physiological Basis of Photoperiod Sesnsitivity in Groundnut. Thesis submitted to Acharya N.G. Ranga Agricultural University, Rajendranagar, Hyderabad, India, for M.Sc (Ag).
7. Vijaygopal Kakani. 1999. Effects of High Temperature on Reproductive Growth and Development of Peanut. Advisor for field expts conducted at ICRISAT for partial fulfilment of PhD degree. Thesis submitted to the University Of Reading, U.K.
8. Asalatha Manda 2005. Physiological basis for genotypic differences in resistance to aflatoxin production in peanuts. Thesis submitted to The University of Queensland, Brisbane for Ph.D.

9. Amos Topi 2008. Socioeconomic assessment of factors influencing adoption and management of new peanut varieties in Papua New Guinea. Thesis submitted to the University of Queensland, Brisbane, MPhil (economics).
10. Darunee Puangbut 2009. Physiological basis for genotypic differences in recovery responses from early season drought in peanuts. Ph.D Thesis submitted to the Khonkaen University, Thailand
11. Anuruck Arunyanarak 2009. Application of chlorophyll stability as a tool for selection of drought tolerant peanut germplasm. Ph.D Thesis submitted to the Khonkaen University, Thailand
12. Solomon Admassu Seyom 2017. Optimising Genotype x Environment x Management Interactions to Enhance Maize Productivity in Variable Agro-Climates of Eastern and Southern Africa. Ph.D Thesis submitted to the University of Queensland, Australia.
13. Nia Romania Patriawaty 2017. Genotypic variation for tolerance to high temperature stress during reproductive phase in mungbean [*Vigna radiata* (L.) Wilczek]. MPhil Thesis submitted to the University of Queensland, Australia.

### On-going post-graduate students' research at UQ

Degree (State if Honours, Masters by Coursework, Masters by Research or PhD. Ongoing or completed)	P/T or F/T	Student's Name	Date of Enrolment mm/yy	Date Thesis Submitted mm/yy	Date Awarded mm/yy	Supervisor, Co-Supervisor or Associate Supervisor (percent contribution)
PhD ongoing (UQ)	P/T	Dan O'Connor	Jul-2012	--	--	30% Principal supervisor
PhD ongoing (UQ)	F/T	Prameela Rani	Jan 2017	-	-	60% Principal supervisor
PhD ongoing (UQ)	F/T	Mahendra raj Sabampillai	Sep 2017	-	-	60% Principal supervisor

### List of publications

#### Book

1. Lee, A.N., Wright, G.C and Rao C.N. Rachaputi. (eds.) 2015. Peanut: Bio-actives and Allergens. DEStech Publications. 439N, DUKE ST., Lancaster, PA 17602,USA (<http://www.destechpub.com/links/catalogs/bookstore/food-science-10/peanuts-bioactives-and-allergens/>)

#### Book chapters

1. Rachaputi R.C.N., Wright G., (2016) Peanuts: Overview. In: Wrigley, C., Corke, H., Seetharaman, K., and Faubion, J., (eds.) Encyclopaedia of Food Grains, 2nd Edition, pp. 334-340 Oxford: Academic Press

2. Rao C.N. Rachaputi, Wright, G.C., and Lee, Alice 2015. Peanut a friend or a foe? Ed. Lee, A.N., Wright, G.C and Rao C.N. Rachaputi. Peanut:Bio-actives and Allergens. DESTech Publishing, USA.
3. Vijaya Gopal Kakani, Timothy R. Wheeler, Peter Q. Craufurd and Rao C. N. Rachaputi 2015. Effect of High Temperature and Water Stress on Groundnuts Under Field Conditions. Ed. R. Mahalingam "Combined Stresses in Plants". Springer International Publishing Switzerland, DOI 10.1007/978-3-319-07899-1\_8. P 1-22.
4. Rao C N Rachaputi and Hughes, M., 2014. Productivity and Marketing Enhancement for Peanut in Papua New Guinea and Australia- Adoption study. ACIAR Publication
5. Nageswara Rao. R.C.N., SheshsaSai, M.S., Nataraja Karaba., Rohini, S., Raama,N., Kumaraswamy, S., Prasad., T.G., and Udaykumar, M. (2012) Genetic approaches to enhance adaptation of groundnut (*Arachis hypogaea*. L.) to abiotic stresses. Ed. Tetuja et.al.. "Improving Crop Resistance to Abiotic Stress" Wiley-Blackwell, Wiley-VCH Verlag GmbH & Co., Germany CH14, P304-360.
6. Rachaputi, R.C.N and Wright, G.C (2011) "Reducing Aflatoxin in Peanuts Using Agronomic Management and Bio-Control Strategies in Indonesia and Australia" An Adoption Study" ACIAR- Bulletin. ISBN 978 1 921962 04 2 (print) ISBN 978 1 921962 05 9 (online); P 41-46
7. Nageswara Rao, C. Rachaputi., and Wright, G.C. (2004). 'Drought Resistant Ideotypes:Future Technologies And Approaches For The Development Of . pp 391- 394. In Encyclopaedia of Plant and Crop Science 1, DOI: 10.1081/E-EPCS 120010407, Marcel Dekker.
8. Wright, G.C. and Nageswara Rao, C. Rachaputi. (2004). 'Drought and Drought Resistance'. pp 386-390. In Encyclopaedia of Plant and Crop Science 1, DOI: 10.1081/E-EPCS 120010407, Marcel Dekker
9. Wright, G.C. and Nageswara Rao C Rachaputi 2002 "Transpiration Efficiency" pp 982- 988. In Encyclopaedia of Water Science (Stewart B. A. and Terry Howell eds.) Marcel Dekker, Inc.
10. Nageswara Rao R.C and Nigam, S.N. 2002. Genetic Options for Drought Management in Groundnut. In "Management of Agricultural Drought; Agronomic and Genetic Options "(N.P Saxena Ed.). Oxford & IBH Publishing Co., New Delhi.
11. Wright, G.C., Nageswara Rao, R.C., and Basu, M.S. 1996. A physiological approach to the understanding of genotype by environment interactions- A case study on improvement of drought adaptation in groundnut. Page(s) 365—381 In Plant Adaptation and Crop Improvement: proceedings of an international workshop, 28 Nov --3 Dec 1994, ICRISAT Asia Center, India (Cooper, M. and Hammer, G.L. eds.). CAB International.
12. Subbarao, G.V., Johansen, C., Nageswara Rao, R.C., and Wright, G.C. 1995. Transpiration Efficiency Avenues for genetic improvement. Pages 785-806 In Handbook of Plant and Crop Physiology (Pessaraki, M., ed.) Marcel Dekker Inc., USA. ISBN: 0-8247-9250-5, PP 785 806.
13. Wright, G.C., and Nageswara Rao, R.C. 1994. Groundnut water relations. Pages 281-336 In The Groundnut Crop: A Scientific basis for improvement. (Smartt, J.E., ed.) Chapman & Hall, London. ISBN 0 412 408201.
14. Wright, G.C., Hubick, K.T., Farquhar, G.D. and Nageswara Rao, R.C. 1993. Genetic and environmental variation in transpiration efficiency and its correlation with carbon isotope discrimination and specific leaf area in peanut. Pages 247-267 In Stable isotopes and plant carbon water relations (Ehleringer, J., Hall, A.E., and Farquhar, G.D eds.) Academic press. USA.

#### a. Scientific Editing

15. Michael Hughes, Rao C N Rachaputi, Lastus Kuniata and A. Ramakrishna 2008. Growing peanuts in Papua New Guinea; A best management practice manual (ACIAR Monograph No. 134, 77pp) (ISBN 978 1 921434 86 0)
16. Rao C.N. Rachaputi, Wright G.C., Lastus Kuniata and Ramakrishna, A. 2006. Proceedings of the final review meeting of the project ASEM 2001/055 on “Improving yield and economic viability of peanut production in Papua New Guinea and Australia using integrated management and modelling approaches, 18-19 Oct 2005, Lae: Papua New Guinea, ACIAR Proceedings (PR122, pp.118) (ISBN 1 86320 466 3)
17. Cruickshank, .W., Rachaputi, N.C., Wright, G.C. and Nigam, S.N. (2003). Breeding of Drought-resistant Peanuts. Proceedings of Final Review Meeting, 25 –27 February, 2002 at Hyderabad, Andhra Pradesh India. ACIAR Proceedings No. 112. pp. 107 (ISBN 1 86320 387 7)
18. Wright, G.C. and Nageswara Rao, R.C. (eds.) 1994. Selection for water use efficiency in grain legumes. Technical Report of a Workshop 5-7 May 1993, ICRISAT Patancheru A.P 502 324: India, ACIAR Technical Reports N0. 27,70p. (ISBN 1 86320 102 5)
19. Nageswara Rao, R.C. and Subramanyam, P. (eds.) 1992. Proceedings of the Fifth Regional Groundnut Work Shop for Southern Africa. 9-12 March, Lilongwe, Malawi. Patancheru, A.P. 502324: International Crops Research Institute for the Semi-Arid Tropics. 138 PP. ISBN 92-9066-234-4, CPE 079.

#### Peer reviewed journal articles

20. Nia R. Patriyawaty, Rao C.N. Rachaputi, Doug George, Col Douglas 2017. Genotypic Variability for Tolerance to High Temperature Stress at Reproductive Phase in Mungbean [*Vigna radiata* (L.) Wilczek]. *Scientia Horticulturae*. (Accepted for publication)
21. Solomon Admassu, Yash Chauhan, Rao Rachaputi, Solomon Fekybelu and Boddupalli Prasanna 2017. Characterization of maize cropping systems in eastern and southern Africa using the APSIM Model. *Agricultural and Forest Meteorology*. (Accepted for publication)
22. Solomon Admassu, **Rao C.N. Rachaputi**, Yash. Chauhan, B. M. Prasanna, K. F. Solomon. 2017 Application of the APSIM model to exploit GxExM interactions for maize improvement in Ethiopia. *Field Crops Research*. (In Press)
23. Yashvir Chauhan, Samantha Allard, Rex Williams, Brett Williams, Sagadevan Mundree, Karine Chenu, N.C. Rachaputi. 2017. Characterisation of chickpea cropping systems in Australia for major abiotic production constraints. *Field Crops Research* 204 (2017) 120–134
24. Cheng-Yuan Xu, Shahla Hosseini Bai, Yanbin Hao, Rao C.N. Rachaputi, Zhihong Xu, Helen M. Wallace. 2015. Peanut shell biochar improves soil properties and peanut kernel quality on a red Ferrosol”. *Journal of Soils and Sediments*. (DOI: 10.1007/s11368-015-1242-z)

25. Rao C.N. Rachaputi, Yashvir Chauhan, Col Douglas. William Martin, Stephen Krosch, Peter Agius, Kristopher King 2015. Physiological basis of yield variation in response to row spacing and plant density of mungbean grown in subtropical environments. *Field Crops Research* 183 (2015) 14–22.
26. Cheng-Yuan Xu, Shahla Hosseini Bai, Yanbin Hao, Rao C.N. Rachaputi, Zhihong Xu, Helen Wallace 2015. Effect of biochar soil amendment on yield and photosynthesis of peanut on two types of soils. *Environmental Science and Pollution Research. On-line Journal* 14, 2015. DOI 10.1007/s11356-014-3820-9
27. Yashvir S Chauhan, and Rao C N Rachaputi 2014. Defining agro-ecological regions for field crops in variable target production environments: a case study on mungbean in the northern grains region of Australia. *Agricultural and Forest Meteorology* 194: 207-217
28. Chari V. Kandala, Rao C. N. Rachaputi, Daniel O'Connor. (2013) Capacitance Sensor for Non-destructive Determination of Total Oil Content in Peanut Kernels. *Journal of Sensor Technology*, 2013, 3, 42-46 (<http://dx.doi.org/10.4236/jst.2013.33008> Published Online September 2013 (<http://www.scirp.org/journal/jst>))
29. Chauhan, Y.S., Wright, G.C., Holzworth, D., Rachaputi, R.C.N., and Payero, J.O. (2013). AQUAMAN – a web-based decision support system for irrigation scheduling in peanuts. *Irrigation Science. On-line journal (Irrigation Science. May 2013, Volume 31, Issue 3, pp 271-283* <http://www.springerlink.com/content/u876328461q26336/fulltext.pdf>
30. Puangbut, D., Jogloy, S., Toomsan, B., Vorasoot , N., Akkasaeng, A., Kesmala, T., Rao C.N. Rachaputi, Wright, G.C., and Patanothai, A. 2010. Physiological basis for tolerance to and recovery from pre-flowering drought in peanut. *Journal of Agronomy and Crop Science*. 196: 258-267.
31. Y.S. Chauhan, G.C.Wright, Rao C.N. Rachaputi, D.Holzworth, A. Broome, S. Krosch, and M.J. Robertson. 2010. Application of a model to assess aflatoxin risk in peanuts *Journal of Agricultural Science*.148:1-11
32. Puangbut, D., Jogloy, S., Toomsan, B., Vorasoot , N., , Akkasaeng, A., Kesmala, T., Rao C.N. Rachaputi, Wright, G.C., and Patanothai, A. 2010. Physiological basis for tolerance to and recovery from pre-flowering drought in peanut. *Journal of Crop Science and Agronomy*. (196(5):358-367
33. Y.S. Chauhan, G.C.Wright, Rao C.N. Rachaputi, D.Holzworth, A. Broome, S. Krosch, and M.J. Robertson. 2010. Application of a model to assess aflatoxin risk in peanuts. *Journal of Agricultural Science*.148:1-11
34. Arunyanark, S. Jogloy, S. Wongkaew, C. Akkasaeng, N. Vorasoot, Rao C.N. Rachaputi, G.C. Wright, A. Patanothai. 2009. Association between aflatoxin contamination and drought tolerance traits in peanut. *Field Crops Research*114:14-22
35. D. Puangbut, S. Jogloy, N. Vorasoot, C. Akkasaeng, T. Kesmala, Rao C.N. Rachaputi, G.C. Wright, A. Patanothai 2009. Association of root dry weight and transpiration efficiency of peanut genotypes under early season drought. *Agricultural Water Management*. 96:1460-1466.
36. Arunyanark, A., Jogloy, S., Akkasaeng, A., Vorasoot, N., Nageswara Rao Rachaputi, Wright G.C. and Patanothai, A. 2008 Chlorophyll stability is an indicator of drought tolerance in peanut. *Journal of Crop Science and Agronomy* 194:113-125
37. Y.S. Chauhan, G.C. Wright and N.C. Rachaputi 2008. Modelling mycotoxin contamination in maize. *Australian Journal of Experimental Agriculture* 48, 358-366.
38. Yash Chauhan,, Graeme Wright, Nageswararao Rachaputi and Kevin McCosker (2008) Identifying Chickpea Homoclimes using the APSIM Chickpea Model . *Australian Journal of Experimental Agriculture*, 59, 1-10.

39. Chauhan, Y., Wright, G.C., Nageswara Rao Rachaputi, Krosch, S., Robertson, M, Hargreaves, J., Broome, A. (2007). Using APSIM-Soil Temp to simulate soil temperature in the podding zone of peanut. *Australian J. Experimental Agric.* 47 (6) 992-999.
40. Sheshshayee, M.S., Bindumadhava, H, Rachaputi. N., Prasad, T.G., Udayakumar, Wright, G.C and Nigam S.N. 2006. Leaf chlorophyll concentration relates to transpiration Efficiency in peanut (*Arachis hypogaea* L). *Annals of applied Biology* 148:7-15 .
41. Nigam, S.N., Chandr, S, Rupasridevi, K, Manohar bhukta, Reddy, A.G.S. Nageswara Rao Rachaputi, Wright, G.C., Reddy, P.V., Deshmukh, M.P, Mathur, R.K., Basu, M.S., Vasundhara S., Vindhiya varman, P., and Nagda, A.K., 2005. Efficiency of physiological trait-based and empirical selection approaches for drought tolerance in groundnut *Annals of Applied Biology*, 146:433–439
42. N.A. Lee, N.C. Rachaputi, G. C. Wright, S. Krosch, K. Norman, J. Anderson, S. Ambarwati, I. Retnowati, O. S. Dharmaputra and I. R. Kennedy. 2005. Validation of Analytical Parameters of a Competitive Direct ELISA for Aflatoxin B1 in Peanuts. *Food and Agricultural Immunology* 16 (2), 149-163.
43. Talwar, H.S., Chandrasekhar, A., and Nageswara Rao, R.C. 2002. Genotypic variability in membrane thermostability in groundnut. *Indian Journal of Plant Physiology.* 7 (2):97-102.
44. Talwar, H.S., Nageswara Rao R.C., and Nigam, S.N. 2002 Influence of Canopy attributes on the productivity of Groundnut. *Indian J Plant Physiology.* 7 (3): 215-220.
45. Nageswara Rao Rachaputi, Wright, G.C., and Krosch, S. 2002. Management practices to minimise pre-harvest aflatoxin contamination in Australian Peanuts. *Australian Journal of Experimental Agriculture* 42:595-605.
46. Nautiyal, P.C., Joshi, Y.C., and Nageswara Rao Rachaputi. 2002. Relationship between relative water content and specific leaf area under progressive soil moisture deficit stress in groundnut. *Field Crops Research* 4017: 1-13.
47. Nigam, S.N., Upadhaya, H.D., Chandra, S., Nageswara Rao, R.C., Wright, G.C. and Reddy, A.G.S. 2001. Gene effects for specific leaf area and harvest index in three crosses of groundnut (*Arachis hypogaea* L.). *Annals of Applied Biology*, 139: 301-306.
48. Nageswara Rao R.C., Talwar, H.S., and Wright, G.C 2001. Rapid Assessment of Specific Leaf Area and leaf Nitrogen in Peanut (*Arachis hypogaea* L.) Using a Chlorophyll Meter. *Journal of Crop Science and Agronomy* 186 (3): 175-182.
49. Reddy, L.J., Nigam, S.N., Nageswara Rao, R.C., and Reddy, N.S. (2001). Registration of ICGV 87354 peanut germplasm with drought tolerance and rust resistance. *Crop Science* 41:274-275.
50. Subramanian, V., Gurutu, S., Nageswara Rao, R.C., and Nigam, S.N. 2000. Identification of DNA polymorphism in cultivated groundnut using random amplified polymorphic DNA (RAPD) assay. *Genome* 43: 656-660.
51. Dwivedi, S.L., Nigam, S.N., and Nageswara Rao, R.C. 2000. Photoperiod Effects on Seed Quality Traits in Peanuts. *Crop Science* 40: 1223-1227.
52. Reddy, L.J., Nigam, S.N., Nageswara Rao, R.C., Reddy, N.S. 2000. Registration of ICGV 87354 Peanut Germplasm with Drought Tolerance and Rust Resistance. *Crop Science*, 41:274-275
53. Jayalakshmi, V., Rajareddy, C., Reddy, P.V. and Nageswarara, R.C. (1999). Genetic analysis of carbon isotope discrimination and specific leaf area in groundnut (*Arachis hypogaea* L.). *J. Oilseeds Res.* 16:1-5.

54. Ashok, Aftab Hussain, I.S., Prasad, T.G., Udaykumar, M., Nageswara Rao, R.C., and Wright, G.C. 1999. Variation in transpiration efficiency and carbon isotope discrimination in cowpea. *Australian Journal of Plant Physiology* 26: 503-510.
55. Udaykumar, M., Devendra, R., Ramaswamy, G.S., Nageswara Rao, R.C., Ashok Roy Stephen, Gangadhara, G.C. Aftab Hussain, I.S and Wright G.C. 1998. Measurement of transpiration efficiency under field conditions in grain legume crops. *Indian Journal of Plant physiology and Biochemistry* 25: 67-75.
56. Nigam, S.N., Nageswara Rao, R.C., and Wynne, J.C. 1998. Effect of temperature and photoperiod on vegetative and reproductive growth of groundnut (*Arachis hypogaea* L.). *Journal of Agronomy and Crop Science* 181: 117-124.
57. Williams, J.H., Nageswara Rao, R.C., Dougbedji, F., and Talwar, H.S. 1996. Radiation interception and modelling as an alternative to destructive samples in crop growth measurements. *Annals of Applied Biology* 129:151-160.
58. Dwivedi, S.L., Nigam, S.N., Nageswara Rao, R.C., Singh U., and Rao, K.V.S. 1996. Effect of Drought on oil, fatty acids and protein contents of groundnut (*Arachis hypogaea* L.) seeds. *Field Crops Research*. 48: 125-133.
59. Subbarao, G.V., Johansen, C., Slinkard, A.E., Nageswara Rao, R.C., Saxena, N.P., and Chauhan, Y.S. 1995 Strategies for improving drought resistance in grain legumes. *Critical Reviews in Plant Sciences*. 14(6): 469-523.
60. Mehan, V.K., Ramakrishna, N., Rao, R.C.N., and McDonald, D. 1995. Preharvest aflatoxin contamination of groundnuts subjected to terminal drought stress in post-rainy season. *Mycotoxin Research* 11:103-109.
61. Nageswara Rao, R.C., Gowda, C.L.L., Johansen, C., Rupela, O.P., Singh, A.K., Nigam, S.N., Anders, M.M., Rego, T.J., and McDonald, D. 1995. A proposal for a working group on acid soil tolerance in grain legumes. PP 429-431 In Date, R.A., et al (ed) *Plant Soil Interactions at Low pH*, Kluwer Academic Publishers, Netherlands.
62. Nageswara Rao, R.C., Udaykumar, M., Farquhar, G.D., Talwar, H.S., and Prasad, T.G. 1995. Variation in carbon isotope discrimination and its relation to specific leaf area and ribulose 1-5 biphosphate carboxylase content in groundnut genotypes. *Australian Journal of Plant Physiology* 22(4):545-551.
63. Nigam, S.N., Nageswara Rao, R.C., Wynne, J.C., Williams, J.H., Fitzner, M.S., and Nagabhushanam, G.V.S. 1994. Effect and interaction of temperature and photoperiod on growth and partitioning in three groundnut genotypes. *Annals of Applied Biology* 125: 541-552.
64. Nageswara Rao, R.C., Singh, A.K., Reddy, L.J., and Nigam, S.N. 1994. Prospects for utilization of genotypic variability for yield improvement in groundnut. *Journal of Oilseeds Research* 11(2):259-268.
65. Hebbar, K.B., Sashidhar, V.R., Udayakumar, M., Devendra, R., and Nageswara Rao, R.C. 1994. A comparative assessment of water use efficiency in groundnut (*Arachis hypogaea*) grown in containers and in the field under water-limited conditions. *Journal of Agricultural Science, Cambridge* 122:429-434.
66. Wright, G.C., Nageswara Rao, R.C., and Farquhar, G.D. 1994. Water-use efficiency and carbon isotope discrimination in peanut under water deficit conditions. *Crop Science* 34:92-97.
67. Nageswara Rao, R.C., and Wright, G.C. 1994. Stability of the relationship between specific leaf area and carbon isotope discrimination across environments in peanut. *Crop Science* 34:98-103.



68. Azam-Ali, S.N., Craigon, J., Nageswara Rao, R.C., Wadia, K.D.R., and Williams, J.H. 1993. A simple method for calculating the population/yield relations of groundnut in semi-arid climates. *Journal of Agricultural Science, Cambridge* 121:213-222.
69. Nageswara Rao, R.C., Williams, J.H., Wadia, K.D.R., Hubick, K.T., and Farquhar, G.D. 1993. Crop growth, water-use efficiency and carbon isotope discrimination in groundnut (*Arachis hypogaea* L.) genotypes under end-of season drought conditions. *Annals of Applied Biology* 122:357-367.
70. Nageswara Rao, R.C. 1992. Some crop physiological approaches for groundnut improvement. *Journal of Oilseed Research* 9 (2): 286-296.
71. Nageswara Rao, R.C., Williams, J.H., Rao, V.M., and Wadia, K.D.R. 1992. A hand-held red-infrared radiometer for measuring radiation interception by crop canopies. *Field Crops Research* 29:353-360.
72. Singh, M., Rao, R.C.N., Williams, J.H. 1991. A statistical assessment of genotypic sensitivity of groundnut (*Arachis hypogaea* L.) to drought in line source sprinkler experiments. *Euphytica* 57:19-25.
73. Mehan, V.K., Amadou Ba., McDonald, D., Renard, J.L., Nageswara Rao, R.C. and Jayanthi, S. 1991. Field screening of groundnut for resistance to seed infection by *Aspergillus flavus*. *Oleagineux*. 46(3): 109-118.
74. Nageswara Rao, R.C., Wadia, K.D.R., and Williams, J.H. 1990. Intercropping of short and long duration groundnut genotypes to increase productivity in environments prone to end-of-season drought. *Experimental Agriculture* 26: 63-72.
75. Nageswara Rao, R.C., Williams, J.H., and Murari Singh. 1989. Relationship between sensitivity to drought and yield potential in peanut genotypes under different drought patterns. *Agronomy Journal* 81:887-893.
76. Azam-Ali, S.N., Simmonds, L.P., Nageswara Rao, R.C., and Williams, J.H. 1989. Population, growth and water use of groundnut maintained on stored water. III. Dry matter, water use and light interception. *Experimental Agriculture* 25:77-86.
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**Conference Abstracts, Posters and technical reports and presentations (not peer reviewed)**

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2. Rao C.N. Rachaputi. 2016. Keeping finger on pulse-An Australian Experience” at the Indian National Pulses Conference organised by the All India Pulses Research Institute, University of Agricultural Sciences, Bangalore, 21-22 May, 2016.
3. Rao C.N. Rachaputi. 2015. Profitable grain legumes for North Australia, at the North Australian Food Features Conference, 4-5 Nov 2015, Darwin.
4. D.J. O'Connor, R.C.N Rachaputi, R. J. Henry, A. Furtado and G.C. Wright. 2015. Integration of rapid phenotyping and genotyping tools for peanut genetic improvement. Poster presented at the International Conference on Advances in *Arachis* through Genomics & Biotechnology. Nov 5 -7, 2015, Brisbane.
5. Rao. C.N Rachaputi, Kerry McKenzi, Nikki Seymour, Rebecca Raymond, Doug Sands and Yashvir Chauhan. 2015. Achieving reliable yields of legume break crops is the key for sustainable farming systems- A case study with chickpea. Poster presented at the Tropical Agriculture Conference, 16-18 Nov 2015, Brisbane.
6. Solomon Admassu, Rao C.N. Rachaputi, Chauhan Yash, Fekybelu Solomon and Prasanna Boddupalli. 2015. Genotype x environment x management interactions underpinning yield variation of maize (*Zea mays* L.) in eastern Africa. Poster presented at the Tropical Agriculture Conference, 16-18 Nov 2015, Brisbane.
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