

# Journal articles – Winter 2020

Anonymous. 2019.

Findings from Department of Agronomy Yields New Data on Legume Research

[Optimizing crop geometry and nutrient management for yield, water productivity

and economics of kharif groundnut (*Arachis hypogaea* L.)].

NewsRX LLC. p. 71.

Anonymous. 2019.

Findings from Tamil Nadu Agricultural University in the Area of Agriculture and

Biology Described [Relative Performance of Groundnut (*Arachis Hypogaea*) Based

Intercropping Systems Under Different Irrigation Levels].

NewsRX LLC. p. 76.

Anonymous. 2019. New

Agronomy Data Have Been Reported by Investigators at Shandong Agricultural

University (Effects of Water-soluble Fertilizer On Leaf Senescence and Nutrient

Utilization of Peanut). NewsRX LLC.

Anonymous. 2019.

Research on Genomics Reported by Researchers at Crops Research Institute

[Genome-wide identification of microsatellite markers from cultivated peanut

(*Arachis hypogaea* L.)]. NewsRX LLC. p.

468.

Anonymous. 2019.

Researchers from Landmark University Describe Findings in

Agronomy [Zinc Sulphate and Boron-Based Foliar Fertilizer Effect on Growth, Yield, Minerals, and Heavy Metal Composition of Groundnut (*Arachis hypogaea* L) Grown on an Alfisol]. NewsRX LLC. p. 3284.

Aboyeji, C., O. Dunsin, A.O. Adekiya, C. Chinedum, K.O. Suleiman, F.O. Okunlola, et al. 2019. Zinc Sulphate and Boron-Based Foliar Fertilizer Effect on Growth, Yield, Minerals, and Heavy Metal Composition of Groundnut (*Arachis hypogaea* L) Grown on an Alfisol. International Journal of Agronomy: 1-7. doi:10.1155/2019/5347870.

Bakal, H. and H. Arioglu. 2019. The determination of fatty acids composition and oil quality factors of some peanut varieties having different market types at different harvesting times in main and double crop growing seasons in Mediterranean region. Turkish Journal of Field Crops 24 (2): 221-229. doi:10.17557/tjfc.655078.

Becerra-Tomás, N., I. Paz-Graniel, C.W.C. Kendall, H. Kahleova, D. Rahelic', J.L. Sievenpiper, et al. 2019. Nut consumption and incidence of cardiovascular diseases and cardiovascular disease mortality: a meta-analysis of prospective cohort studies. Nutrition Reviews 77 (10): 691-709.

Branch, W.D. 2019. Registration of 'Georgia-18RU' Peanut. Journal of Plant Registrations 13 (3): 326-329. doi:10.3198/jpr2018.11.0073crc.

Cesari, A.B., N.S. Paulucci, M. López-Gómez, J.

Hidalgo-Castellanos, C. Lluch Plá and M.S. Dardanelli. 2019. Performance of Bradyrhizobium and Bradyrhizobium–Azospirillum in Alleviating the Effects of Water-Restrictive Conditions During the Early Stages of *Arachis hypogaea* Growth. *Journal of Plant Growth Regulation* 38 (4): 1362-1374. doi:10.1007/s00344-019-09939-4.

Chaudhari, S., D. Khare, S.C. Patil, S. Sundravada, M.T. Variath, H.K. Sudini, Surendra S. Manohar, Ramesh S. Bhat, and Janila Pasupuleti. 2019. Genotype × Environment Studies on Resistance to Late Leaf Spot and Rust in Genomic Selection Training Population of Peanut (*Arachis hypogaea* L.). *Frontiers in Plant Science* 10: 1. doi:10.3389/fpls.2019.01338

Chen, F., H. Ma, Y. Li, H. Wang, A. Samad, J. Zhou, L. Zhu, Y. Zhang, J. He, X. Fan, and T. Jin.. 2019. Screening of nanobody specific for peanut major allergen Ara h 3 by phage display. *Journal of Agricultural and Food Chemistry* 67 (40): 11219-11229.

Chen, L., Y.D. Wu, X.Y. Chong, Q.H. Xin, D.X. Wang and K. Bian. 2019. Seed-borne endophytic *Bacillus velezensis* LHSB1 mediate the biocontrol of peanut stem rot caused by *Sclerotium rolfsii*. *Journal of Applied Microbiology* doi: 10.1111/jam.14508 [epub ahead of print]

Chi, B., Y. Zhang, D. Zhang, X. Zhang, J. Dai and H. Dong. 2019. Wide-strip intercropping of cotton and peanut combined with strip rotation increases crop productivity and economic returns. *Field Crops Research*

243 (1): N.PAG-N.PAG. doi:10.1016/j.fcr.2019.107617.

Chinthrajah, S., S. Cao, C. Liu, S.-C. Lyu, S.B. Sindher, A. Long, V. Sampath, D. Petroni, M. Londei, and K.C. Nadeau. 2019. Phase 2a randomized, placebo-controlled study of anti-IL-33 in peanut allergy.

JCI Insight 4 (22) doi:  
10.1172/jci.insight.131347.

Culbreath, A.K., T.B. Brenneman, R.C. Kemerait, Jr., K.L. Stevenson and D.J. Anco. 2019. Combinations of elemental sulfur with demethylation inhibitor fungicides for management of late leaf spot (*Nothopassalora personata*) of peanut.

Crop Science 125.  
<https://doi.org.10.1016/j.cropro.2019.104911>

Du, L., X. Li, J. Chen, X. Jiang, Q. Ju, C. Qu, and M. Qu. 2019. Density effect and economic threshold of purple nutsedge (*Cyperus rotundus* L.) in peanut (*Arachis hypogaea* L.). International Journal of Plant Production 13 (4): 309-316.

El-Zemrany, H.M., G.A.A. Mekhemar and S.S.A. El Salam. 2019. Evaluation efficiency of liquid bradyrhizobium and *Azotobacter chroococcum* DSM 2286 as co-inoculation affected by salinity level of irrigation level of irrigation water on peanut in sandy soils of Egypt. روتوباكتر كروكوكوم السائلة وتأثيره  
Menoufia Journal of Plant Production 4: 201-217..

Frith, K. and C.H. Katelaris. 2019. Current perspectives on peanut allergy. Internal Medicine Journal 49 (12): 1480-1487. doi:10.1111/imj.14658.

Gangurde, S.S., H. Wang, S. Yaduru, M.K. Pandey, J.C. Fountain, Y. Chu, T. Isleib, C.C. Holbrook, A. Xavier, A.K.

Culbreath, P.  
Ozias-Akins, R.K. Varshnev, and B. Guo.  
2019. Nested-association mapping  
(NAM)-based genetic dissection uncovers candidate genes for  
seed and pod  
weights in peanut (*Arachis hypogaea*). *Plant Biotechnology  
Journal* n/a.  
doi:10.1111/pbi.13311. [epub ahead of  
print]

Gao, H., W. Meng, C. Zhang, W. van der Werf, Z. Zhang, S. Wan,  
and F. Zhang. 2019. Yield and nitrogen uptake of sole and  
intercropped maize  
and peanut in response to N fertilizer input. *Food and Energy  
Security* n/a:  
e187. Pages 1-12. doi:10.1002/fes3.187.

Haijin, Z., L. Zhao, N. Xiaofei, Z. Jichao and W. Lingyun.  
2019. Comparison of Active Nitrogen Loss in Four Pathways on a  
Sloped Peanut  
Field with Red Soil in China under Conventional Fertilization  
Conditions.  
*Sustainability* 11 (22): 6219. doi:10.3390/su11226219.

Hilu, K.W., S.A. Friend, V. Vallanadu, A.M. Brown, L.R.  
Hollingsworth Iv and D.R. Bevan. 2019. Molecular evolution of  
genes encoding  
allergen proteins in the peanuts genus *Arachis*: Structural and  
functional  
implications. *PLoS ONE* 14 (11): 1-22.  
doi:10.1371/journal.pone.0222440.

Huang, B., F. Qi, Z. Sun, L. Miao, Z. Zhang, H. Liu, Y. Fang,  
W. Dong, F. Tang, Z. Sheng, and X. Zhang. 2019. Marker-  
assisted backcrossing to  
improve seed oleic acid content in four elite and popular  
peanut (*Arachis  
hypogaea* L.) cultivars with high oil content. *Breeding Science*

69 (2): 234-243. Doi:10.1270/jsbbs.18107.

Ijaz, M., S. Perveen, A. Nawaz, S. Ul-Allah, A. Sattar, A. Sher, S. Ahmad, F. Nawaz, and I. Rasheed. 2019. Eco-friendly alternatives to synthetic fertilizers for maximizing peanut (*Arachis hypogea* L.) production under arid regions in Punjab, Pakistan. *Journal of Plant Nutrition* 43 (11): 1-11. DOI: 10.1080/01904167.2019.1702203.

Iqdiam, B.M., M.O. Abuagela, Z. Boz, S.M. Marshall, R. Goodrich-Schneider, C.A. Sims, M.R. Marshall, A. J. MacIntosh, and B. A.Welt. 2019. Effects of atmospheric pressure plasma jet treatment on aflatoxin level, physiochemical quality, and sensory attributes of peanuts. *Journal of Food Processing and Preservation* 44: e14305. Pages 1-11. doi:10.1111/jfpp.14305.

Jani, A.D., M.J. Mulvaney, K.S. Balkcom, C.W. Wood, D.L. Jordan, B.H. Wood, and P. Devoka. 2019. Peanut residues supply minimal plant-available nitrogen on a major soil series in the USA peanut basin. *Soil Use and Management*. DOI:10.1111/sum12563

Joshi, P., M.P. Jadhav, K. Shirasawa, A. Yadawad and R.S. Bhat. 2020. Foliar disease resistant and productive mutants from the introgression lines of peanut (*Arachis hypogaea*). *Plant Breeding* 139 (1): 148-155. doi:10.1111/pbr.12762. [Feb 2020 issue]

Ju, Q., F. Ouyang, S. Gu, F. Qiao, Q. Yang, M. Qu, and F. Ge. 2019. Strip intercropping peanut with maize for peanut aphid biological control and yield enhancement.

Agriculture,  
Ecosystems and Environment 286. Pages  
1-9. doi:10.1016/j.agee.2019.106682.

Juliano, F.F., J.F.R. Alvarenga, R.M. Lamuela-Raventos, A.P. Massarioli, L.M. Lima, R.C. Santos, and S.M Alencar. 2019. Polyphenol analysis using high-resolution mass spectrometry allows differentiation of drought tolerant peanut genotypes. Journal of the Science of Food and Agriculture 100 (2): 721-731. doi:10.1002/jsfa.10075.

Lavkor, I. 2019. Molecular characterization of aflatoxin biosynthesis genes of *Aspergillus flavus* from peanuts production area. Legume Research 42 (5): 609-614. doi:10.18805/LR-508.

Lee, S., S. Kim, K. Park, J. Lee and J. Park. 2019. Clinical features and culprit food allergens of Korean adult food allergy patients: a cross-sectional single-institute study. Allergy, Asthma & Immunology Research 11 (5): 723-735. doi: 10.4168/aair.2019.11.5.723

Morales-Romero, J., M. Bedolla-Barajas, J.A. Valdez-Soto, T.I. Bedolla-Pulido, M.A. Segura-Delgadillo and A. Bedolla-Pulido. 2019. Anaphylaxis associated with peanuts and nuts in late Mexican adolescents: a population based study. International Journal of Pediatrics 7 (5): 9443-9451. Doi: 10.22038/IJP2019.36479.3178

Moslavac, T., D. Šubaric', J. Babic', A. Šaric', D.V. Čepo and A. Jozinovic'. 2019. Production and stabilization of peanut oil. Hrana u Zdravlju i Bolesti / Food in Health

and Disease 8 (1): 40-45.

Pi, X., Y. Wan, Y. Yang, R. Li, X. Wu, M. Xie, X. Lin, and G. Fu. 2019. Research progress in peanut allergens and their allergenicity reduction. Trends in Food Science & Technology 93: 212-220. Doi.org/10.1016/j.tifs.2019.09.014

Shakya, A.K., R.S.J. Ingrole, G. Joshi, M.J. Uddin, S. Anvari, C.M. Davis, and G.S. Hill. 2019. Microneedles coated with peanut allergen enable desensitization of peanut sensitized mice. Journal of Controlled Release 314: 38-47. doi:10.1016/j.jconrel.2019.09.022.

Sharma, R.P., R.S. Singh, S.K. Singh and S.S. Sharma. 2019. Weathered basalt application for management of Vertisols: A traditional knowledge of groundnut (*Arachis hypogaea*) growers of Gujarat, India. Indian Journal of Traditional Knowledge 18 (4): 793-799.

Sicherer, S.H., R.A. Wood, T.T. Perry, S.M. Jones, D.Y.M. Leung, A.K. Henning, P. Dawson, A.W. Burks, R. Lindblad, and H.A. Sampson. 2019. Clinical factors associated with peanut allergy in a high-risk infant cohort. Allergy 74 (11): 2199-2211. doi:10.1111/all.13920.

Singh, S.P., R.S. Yadav, S.L. Godara, A. Kumawat and Birbal. 2019. Herbicidal weed management in groundnut (*Arachis hypogaea*). Legume Research: An International Journal 42 (6): 829-837. doi:10.18805/A-4833.

Soller, L., E.M. Abrams and E.S. Chan. 2019. An update on the controversy around offering oral immunotherapy to peanut-allergic children outside of research. Annals of Allergy, Asthma, & Immunology 122 (6):



559-562. doi: 10.1016/j.anai.2019.02.011

Song, H., Z. Guo, X. Hu, L. Qian, F. Miao, X. Zhang, and J. Chen. 2019. Evolutionary balance between LRR domain loss and young NBS-LRR genes production governs disease resistance in *Arachis hypogaea* cv. Tifrunner. *BM Genomics* 20 (1): 1-12.  
Doi.org/10.1186/s12864-019-6212-1

Thomas, T.S., R. Robertson and K. Boote. 2019. Evaluating risk of aflatoxin field contamination from climate change using new modules inside DSSAT. IFPRI – Discussion Paper 01859 . International Food Policy Research Institute, Washington; USA. 59 pages.

Tu, J. and W. Wu. 2019. Critical functional properties of defatted peanut meal produced by aqueous extraction and conventional methods. *Journal of Food science and Technology-Mysore* 56 (1): 4722-4731.

Ulutasdemir, T. and A. Cagri-Mehmetoglu. 2019. Effects of edible coating containing *Williopsis saturnus* var. *saturnus* on fungal growth and aflatoxin production by *Aspergillus flavus* in peanuts. *Journal of Food Safety* 39 (6): e12698-e12698.  
Doi.org/10.1111/fs.12698

Virk, G., C. Pilon, J.L. Snider and R.S. Tubbs. 2019. Early-season vigor in peanuts is dependent on leaf area responses to temperature. *Agronomy Journal* n/a. doi:10.1002/agj2.20017. [accepted article]

Wang, X.B., C.M. Hsu, J.C.B. Dubeux, C. Mackowiak, A. Blount, X.G. Han, and H. Liao. 2019. Effects of rhizoma peanut cultivars (*Arachis glabrata* Benth.) on the soil bacterial diversity and

predicted

function in nitrogen fixation. *Ecology & Evolution* 9 (22): 12676-12687. doi:10.1002/ece3.5735.

Yaping, Z., Z. Zullo, W. Lili, W. Chunxiao, L.U. Zeqi, J. Wei, et al. 2019. High-yield and High-efficiency Standardized Cultivation Technique for Wheat Interplanting with Peanuts. *Asian Agricultural Research* 11: 70-80. doi:10.19601/j.cnki.issnl943-9903.2019.11.017.

Yasmine, E., M.A. Rahman, M.M. Hasan, M.A. Alain, M.S. Hague, M.R. Ismail, et al. 2019. Morphophysiological and yield attributes of groundnut varieties under different salinity stress conditions. p. 684-687.

Yin, D., C. Ji, Q. Song, W. Zhang, X. Zhang, K. Zhao, et al. 2019. Comparison of *Arachis monticola* with Diploid and Cultivated Tetraploid Genomes Reveals Asymmetric Subgenome Evolution and Improvement of Peanut.

Yuan, C., Q. Sun and Y. Kong. 2019. Genome-wide mining seed-specific candidate genes from peanut for promoter cloning. *PLoS ONE* 14: e0214025-e0214025.

Zambrano Ibarra, G., V. Fuentes Aparicio, S. Infante Herrero, M. Blanca and L. Zapatero Remon. 2019. Peanut allergy in Spanish children: comparative profile of peanut allergy versus tolerance. *International Archives of Allergy and Immunology* 178: 370-376.

Zhang, S.Z., X.H. Hu, H.R. Miao, Y. Chu, F.G. Cui, W.Q. Yang, et al. 2019. QTL identification for seed weight and size based on a high-density SLAF-seq genetic map in peanut (*Arachis hypogaea*

L.). *Bmc Plant  
Biology* 19. doi:10.1186/s12870-019-2164-5.

Zhang.Y., S.Wang, Z.  
Zheng, L.Wang, C. Wang, Z. Lu, W. Jiang, H. Zang, and Y.  
Zheng. al. 2019.  
Chemical Fertilizer Reduction and High Yield Cultivation  
Technique for Peanut.  
*Asian Agricultural Research* 11 (10): 87-90.  
doi:10.19601/j.cnki.issn1943-9903.2019.10.019.

Zhang, T., Y. Shi, Y. Zhao, J. Wang, M. Wang, B. Niu, et al.  
2019. Different thermal processing effects on peanut  
allergenicity. *Journal of  
the Science of Food and Agriculture* 99: 2321-2328.

Zheng, H., Z. Liu, X. Nie, J. Zuo and L. Wang. 2019.  
Comparison of Active Nitrogen Loss in Four Pathways on a  
Sloped Peanut Field  
with Red Soil in China under Conventional Fertilization  
Conditions.

Zhong, S. and H.-c. Zeng. 2019. Effect of peanut (*Arachis  
hypogaea*  
L.)/cowpea (*Vigna unguiculata* L.) intercropping combined with  
organic mature  
application on soil microfauna. *Geoderma* 354.  
doi:10.1016/j.geoderma.2019.07.021.

Zhong, Y., J. Chew, M. Tan and J. Soh. 2019. Efficacy and  
safety of oral immunotherapy for peanut allergy: a pilot study  
in Singaporean  
children. *Asia Pacific Allergy* 9: e1-e1.

Zhou, J., Q. Qi, C. Wang, Y. Qian, G. Liu, Y. Wang, et al.  
2019. Surface plasmon resonance (SPR) biosensors for food  
allergen detection in  
food matrices. *Biosensors & Bioelectronics* 142: 111449-111449.

Zhou, W., W.D. Branch, L. Gilliam and J.A. Marshall. 2019. Phytosterol composition of *Arachis hypogaea* seeds from different maturity classes. *Molecules* 24: 106-106.

Zou, S., Y.-C. Tseng, A. Zare, D.L. Rowland, B.L. Tillman and S.-C. Yoon. 2019. Peanut maturity classification using hyperspectral imagery. *Biosystems Engineering* 188: 165-177. doi:10.1016/j.biosystemseng.2019.10.019.

王, 王 and 王. 2019. PGPR对花生种子萌发和根际土壤微生物的影响. *Effect of PGPR Compound Flora on Peanut Seedling Growth and Rhizosphere Soil Microorganism*. 32: 2367-2372. doi:10.16213/j.cnki.scjas.2019.10.018.

王, 王, 王, 王, 王, 王, et al. 2019. 含硒肥料对花生硒积累能力的影响. *Effect of Selenium-Containing Fertilizer on Ability of Selenium Accumulation in Peanut*. 32: 2350-2354. doi:10.16213/j.cnki.scjas.2019.10.015.