



Plant Sciences - Research outputs 2015

Research articles

Akinbo, O., Labuschagne, M.T. & Fregene, M. 2015. Introgression of root protein and yield traits from backcross hybrids between cassava and its wild progenitor (*Manihot esculenta* ssp *flabellifolia*). *Journal of Plant Breeding and Crop Science* 7: 1-8.

Brand, R.F., Collins, N. & Du Preez, P.J. 2015. A phytosociology survey and vegetation description of inselbergs in the uKhahlamba-Drakensberg Park World Heritage Site, South Africa. *Koedoe* 57(1): Art. #1233, 12 pages.

Brook, G., Railsback, B., Scott, L., Voarintsoa, N. & Liang, F. 2015. Late Holocene Stalagmite and Tufa climate records for Wonderwerk cave: Relationships between archaeology and climate in Southern Africa. *African Archaeological Review* 12: 669-700.

Castelyn, H.D., Appelgryn, J.J., Mafa, M.S., Pretorius, Z.A. & Visser, B. 2015. Volatiles emitted by leaf rust infected wheat induce a defence response in exposed uninfected seedlings. *Australasian Plant Pathology* 44: 245-254.

Cawood, M.E., Pretorius, J., Van der Westhuizen, J.H. & Van Heerden, F. 2015. A saponin isolated from *Agapanthus africanus* differentially induces apoplastic peroxidase activity in wheat and displays fungicidal properties. *Acta Physiologiae Plantarum* 37(246): 1-8.



Combrink, N.K., Bijzet, Z., Sippel, A.D., Booyse, M. & Labuschagne, M.T. 2015. Genotypic variation of rind colour in citrus Tangor Kiyomy families. *Acta Horticulturae* 1065: 439-447.

Ertiro, B.T., Ogugo, V., Worku, M., Das, B., Olsen, M., Labuschagne, M. & Semagn, K. 2015. Comparison of Kompetitive Allele Specific PCR (KASP) and genotyping by sequencing (GBS) for quality control analysis in maize. *BMC Genomics* 16: 908.

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Jami, F., Slippers, B., Wingfield, M., Loots, M. & Gryzenhout, M. 2015. Temporal and spatial variation of *Botryosphaeriaceae* associated with *Acacia karroo* in South Africa. *Fungal Ecology* 15: 51-62.

Janse van Rensburg, B., McLaren, N.W., Flett, B. & Schoeman, A. 2015. Fumonisin producing *Fusarium* spp. and fumonisin contamination in commercial South African maize. *European Journal of Plant Pathology* 141: 491-504.

Labuschagne, M.T. & Moloi, M.J. 2015. The influence of abiotic stress conditions on dough mixing characteristics of two hard red spring wheat cultivars. *Journal of Cereal Science* 63: 134-139.

Laurie, S.M., Booyse, M. & Labuschagne, M.T. 2015. Multi-environment performance of new orange-fleshed sweetpotato varieties in South Africa. *Crop Science* 55: 1585-1595.



Laurie, S.M., Tjale, S.S., Van den Berg, A.A., Mtileni, M.M. & Labuschagne, M.T. 2015. Agronomic performance of new cream to yellow-orange sweetpotato varieties in diverse environments across South Africa. *South African Journal of Plant and Soil* 32: 147-155.

Marais, E., Scott, L., Gil-Romera, G. & Carrion, J. 2015. The potential of palynology in fossil bat-dung from Arnhem Cave, Namibia. *Transactions of the Royal Society of South Africa* 70: 109-115.

Mohase, L. & Taiwe, B. 2015. Saliva fractions from South African Russian wheat aphid biotypes induce differential defence responses in wheat. *South African Journal of Plant and Soil* 32: 235-240.

Muedi, H., McLaren, N.W. & Fourie, D. 2015. Distribution and severity of bacterial brown spot on dry beans in South Africa: An update. *South African Journal of Science* 111: 52-57.

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Mweta, D., Kalenga-Saka, J. & Labuschagne, M.T. 2015. A comparison of functional properties of native Malawian cocoyam, sweetpotato and cassava starches. *Scientific Research Essays* 10: 580-592.

Nagel, J., Slippers, B., Wingfield, M. & Gryzenhout, M. 2015. Multiple *Phytophthora* species associated with a single riparian ecosystem in South Africa. *Mycologia* 107: 915-925.



Ndhlela, T., Herselman, L., Semagn, K., Magorokosho, C., Mutimaamba, C. & Labuschagne, M.T. 2015. Relationships between heterosis, genetic distances and specific combining ability among CIMMYT and Zimbabwe developed maize inbred lines under stress and optimal conditions. *Euphytica* 204: 635-647.

Parkes, E., Fregene, M., Dixon, A., Okogbenin, E., Boakye-Peprah, B. & Labuschagne, M. 2015. Developing Cassava Mosaic Disease resistant cassava varieties in Ghana using a marker assisted selection approach. *Euphytica* 203: 549-556.

Pretorius, Z.A., Bender, C.M. & Visser, B. 2015. The rusts of wild rye in South Africa. *South African Journal of Botany* 96: 94-98.

Pretorius, Z.A., Prins, R., Malaker, P.K., Barma, N.C.D., Hakim, M.A., Thapa, D., Bansal, U., Cisar, G.L. & Park, R.F. 2015. Assessing the vulnerability of wheat germplasm from Bangladesh and Nepal to African stem rust. *Phytoparasitica* 43: 637-645.

Pretorius, Z.A., Visser, B., Terefe, T., Herselman, L., Prins, R., Soko, T., Siwale, J., Mutari, B., Seling, T.I. & Hodson, D.P. 2015. Races of *Puccinia triticina* detected on wheat in Zimbabwe, Zambia and Malawi and regional germplasm responses. *Australasian Plant Pathology* 44: 217-224.

Rossmann, A.Y., Adams, G.C., Cannon, P.F., Castlebury, L.A., Crous, P.W., Gryzenhout, M., Jaklitsch, W.M., Mejia, L.C., Stoykov, D., Udayanga, D., Voglmayr, H. & Walker, D.M. 2015. Recommendations of generic names in *Diaporthales* competing for protection or use. *IMA Fungus* 6: 145-154.



Scott, L. & Francis Thackeray, J. 2015. Palynology of holocene deposits in Excavation 1 at Wonderwerk Cave, Northern Cape (South Africa). *African Archaeological Review* 32: 839-855.

Singh, R.P., Hodson, D.P., Jin, Y., Lagudah, E.S., Ayliffe, M.A., Bhavani, S., Rouse, M.N., Pretorius, Z.A., Szabo, L.J., Huerta-Espino, J., Basnet, B.R., Lan, C. & Hovmøller, M.S. 2015. Emergence and spread of new races of wheat stem rust fungus: Continued threat to food security and prospects of genetic control. *Phytopathology* 105: 872-884.

Van Aardt, A.C., Bousman, C., Brink, J.S., Brook, G., Jacobs, Z., Du Preez, P.J., Rossouw, L. & Scott, L. 2015. First chronological, palaeoenvironmental, and archaeological data from the Baden-Baden fossil spring complex in the western Free State, South Africa. *Palaeoecology of Africa* 33: 117-152.

Van der Merwe, R., Labuschagne, M.T., Herselman, L. & Hugo, A. 2015. Effect of heat stress on seed yield components and oil composition in high- and mid-oleic sunflower hybrids. *South African Journal of Plant and Soil* 32: 121-128.

Book chapters

Van Aardt, A.C., Bousman, C.B., Brink, J.S., Brook, G.A., Jacobs, Z., Du Preez, P.J., Rossouw, L. & Scott, L. 2015. First chronological, palaeoenvironmental, and archaeological data from the Baden-Baden fossil spring complex in the western Free State, South Africa. In *Changing Climates, Ecosystems and Environments within Arid Southern Africa and Adjoining Regions: Palaeoecology of Africa*, edited by Juergen Runge. USA: CRC Press. pp. 117-152.