



## Plant Sciences - Research outputs 2008

### Research articles

**Benesi, I.R.M., Labuschagne, M.T., Herselman, L., Mahungu, N.M. & Saka, J.K.**

2008. The effect of genotype, location and season on cassava starch extraction.

*Euphytica* 160(1): 59-74.

**Brand, R.F., Du Preez, P.J. & Brown, L.R.** 2008. A floristic description of the Afromontane fynbos communities on Platberg, Eastern Free State, South Africa.

*Koedoe* 50(1): 32-41.

**Coetzee, J.A.** 2008. Reminiscences of palynological research during early years in the Department of Botany, University of the Free State. *Navorsing Nasionale Museum, Bloemfontein* 24(1): 1-8.

**Coetzee, R., Labuschagne, M.T. & Hugo, A.** 2008. Fatty acid and oil variation in seed from kenaf (*Hibiscus cannabinus* L.). *Industrial Crops and Products* 27(1): 104109.

**Craven, M., Barnard, A. & Labuschagne, M.T.** 2008. Significance of kernel moisture content in determination of Hagberg Falling Number in wheat. *South African Journal of Plant Soil* 25(2): 71-78.

**Grobbelaar, J.U.** 2008. A century of botany at the University of the Free State.

*Navorsing Nasionale Museum, Bloemfontein* 24(2): I-V.



**Grobbelaar, J.U.** 2008. Algal biotechnology: four decades of research at the University of the Free State, moving from laboratory to commercial scale. *Navorsing Nasionale Museum, Bloemfontein* 24(2): 9-20.

**Groenewald, E.G.** 2008. Plant tissue culture research at the Department of Plant Sciences, University of the Free State. *Navorsing Nasionale Museum, Bloemfontein* 24(3): 21-28.

**Janse van Rensburg, B., Flett, B.C., McLaren, N.W. & McDonald, A.H.** 2008. Variation in the identification of *Fusarium* spp. In maize samples due to enumerator and growth medium. *South African Journal of Plant and Soil* 25(2): 105-110.

**Jin, Y., Szabo, L., Pretorius, Z.A., Singh, R.P. & Fetch, T.** 2008. Detection of virulence to *Sr24* within race TTKS of *Puccinia graminis* f. sp. *tritici*. *Plant Disease* 92(6): 923-926.

**Joubert, L., Venter, H.J.Y. & Verhoeven, R.L.** 2008. *Cryptolepis bifida* (Apocynaceae: Periplocoideae), a new species from Kenya and Tanzania, Africa. *Botanical Journal of the Linnean Society* 157(2): 343-346.

**Klopper, R., Du Preez, P.J. & Smith, G.F.** 2008. New evidence in support of a disjunct distribution of *Aloe karasbergensis*. *Bothalia* 38(1): 82.

**Labuschagne, M.T., Verhoeven, R. & Nkouanessi, M.** 2008. Drought tolerance assessment of African cowpea accessions based on stomatal behaviour and cell membrane stability. *Journal of Agricultural Science* 146(6): 689-694.



**Lukonge, E.P., Labuschagne, M.T. & Herselman, L.** 2008. Combining ability for yield and fibre characteristics in Tanzanian cotton germplasm. *Euphytica* 161(3): 383-389.

**Manning, J.C., Goldblatt, P., Sieben, E.J.J. & Roux, J.P.** 2008. *Aponogeton fugax*. A new endemic species from the Cape Floral Region, South Africa. *Bothalia* 38(2): 156-159. **McLaren, N.W.** 2008. Reaction of South African soybean cultivars to rust caused by *Phakopsora pachyrhizi*. *South African Journal of Plant and Soil* 25(1): 49-54.

**McLaren, N.W. & Craven, M.** 2008. Evaluation of soybean cultivars for resistance to sclerotinia stalk rot in South Africa. *Crop Protection* 27(2): 231-235.

**Mohase, L.** 2008. Plant activators in disease management. *Navorsinge Nasionale Museum, Bloemfontein* 24(4): 29-36.

**Moldenhauer, J., Pretorius, Z.A., Moerschbacher, B.M., Prins, R. & Van der Westhuizen, A.J.** 2008. Histopathology and PR-protein markers provide inside into adult plant resistance to stripe rust in wheat. *Molecular Plant Pathology* 9(2): 137-145. **Moloi,**

**M.J. & Van der Westhuizen, A.J.** 2008. Antioxidative enzymes and the Russian wheat aphid (*Diuraphis noxia*) resistance response in wheat (*Triticum aestivum*). *Plant Biology* 10(3): 403 - 407.

**Mweta, D.E., Labuschagne, M.T., Koen, E. & Saka, J.D.K.** 2008. Some properties of starches from cocoyam (*Colocasia esculenta*) and cassava (*Manihot esculenta* Crantz.) grown in Malawi. *African Journal of Food Science* (2): 102-111.



**Negussie, T. & Pretorius, Z.A.** 2008. Yield loss of lentil caused by *Uromyces viciaefabae*. *South African Journal of Plant and Soil* 25(1): 32-41.

**Neumann, F., Stager, C., Scott, L., Venter, H.J.T. & Weyhenmeyer, C.** 2008. Holocene vegetation and climate records from Lake Sibaya, KwaZulu-Natal (South Africa). *Review of Palaeobotany and Palynology* 152(3-4): 113-128.

**Nunkumar, A., Caldwell, P.M. & Pretorius, Z.A.** 2008. Alternative hosts of Asian soybean rust (*Phakopsora pachyrhizi*) in South Africa. *South African Journal of Plant and Soil* 25(1): 62-63.

**Ojulong, H., Labuschagne, M.T., Herselman, L. & Fregene, M.** 2008. Cassava clonal evaluation trial based on a new cassava breeding scheme. *Euphytica* 160(1): 119-129.

**Ojulong, H., Labuschagne, M.T., Fregene, M. & Herselman, L.** 2008. Introgression of genes for dry matter content from wild cassava species. *Euphytica* 164(1): 163-172.

**Olsen, A., Prinsloo, L.C., Scott, L. & Jäger, A.K.** 2008. Hyraceum, the fossilized metabolic product of rock hyraxes (*Procavia capensis*), shows GABA-benzodiazepine receptor affinity. *South African Journal of Science* 103(11-12): 437-438.

**Potgieter, G.P. & Pretorius, J.C.** 2008. Control of reserve mobilization in seed cotyledons: Review of research done on *Cucumis sativus* L. at the University of the Free State. *Navorsing Nasionale Museum, Bloemfontein* 24(5): 37-48.



**Potgieter, G.P. & Pretorius, J.C.** 2008. The regulation of reserve mobilization in cotyledons of lipid-rich *Cucumis sativus* L. seeds. *South African Journal of Botany* 74(): 251-259.

**Scholtz, O.F. & Potgieter, G.P.** 2008. An overview: phytoextraction as a rehabilitation strategy for metal polluted soils. *Navorsing Nasionale Museum, Bloemfontein* 24(6): 49-60.

**Scott, L. & Smith, V.R.** 2008. Vegetation and peat development on Marion Island, Southern Ocean, during the Late Holocene. *Navorsing Nasionale Museum, Bloemfontein* 24(7):61-70.

**Scott, L., Holmgren, K. & Partridge, T.C.** 2008. Reconciliation of vegetation and climatic interpretations of pollen profiles and other regional records from the last 60 thousand years in the Savanna Biome of Southern Africa. *Palaeogeography, Palaeoclimatology, Palaeoecology* 257(1-2): 198-206.

**Sieben, E.J.J. & Reinecke, M.K.** 2008. Description of reference conditions for restoration projects of riparian vegetation in the species-rich Fynbos Biome. *South African Journal of Botany* 74(3): 401-411.

**Tegegne, G., Pretorius, J.C. & Swart, W.J.** 2008. Antifungal properties of *Agapanthus africanus* L. extracts against plant pathogens. *Crop Protection* 27(7):1052-1060.



**Van der Westhuizen, A.J.** 2008. The biochemistry of resistance in wheat to the Russian wheat aphid: Review of research done at Botany, University of the Free State.

*Navorsing Nasionale Museum, Bloemfontein* 24(8): 71-80.

**Venter, A.** 2008. Taxonomy of *Lycium* in Africa: a historical review. *Navorsing*

*Nasionale Museum, Bloemfontein* 24(9): 91-104.

**Venter, A.M. & Spies, J.J.** 2008. *Lycium*. In Marhold, K. (ed.), IAPT/IOPB chromosome data 5. *Taxon* 57(2): 553.

**Verhoeven, R.L.** 2008. Evolution from single pollen grains to tetrads and pollinia in Apocynaceae. *Navorsing Nasionale Museum, Bloemfontein* 24(11): 105-116.

**Yigzaw, D., Herselman, L. & Labuschagne, M.T.** 2008. AFLP analysis among Ethiopian Arabica coffee genotypes. *African Journal of Biotechnology* 7(18): 31933198.

**Yigzaw, D., Labuschagne, M.T., Osthoff, G. & Herselman, L.** 2008. Variability and association of bean caffeine content with cup quality and green bean physical characteristics in coffee (*Coffea arabica* L.). *Journal of the Science of Food and Agriculture* 88(10): 1726-1730.

## Book chapters



**Sieben, E.J.J.** 2008. The status and distribution of vascular plants (Magnoliophyta, Lycopphyta, Pteridophyta). In *The status and distribution of freshwater biodiversity in Southern Africa*, edited by W. Darwall, D. Tweddle, K. Smith & P. Skelton. International Union for Conservation of Nature (IUCN): Gland, Switzerland and The South African Institute for Aquatic Biodiversity (SAIAB), Grahamstown, South Africa. pp 83-98.

**Venter, A.M.** 2008. Lycium. In *Sappi tree spotting: Cape from coast to Kalahari*. Edited by V. Thomas, E. Moll & R. Grant. Johannesburg: Jacana Media. pp. 30, 46, 104, 148.

## Reports

**Kotze, D., Ellery, W., Rountree, M., Grenfell, M., Marneweck, G., Nxele, I., Breen, C., Dini, J., Batchelor, A. & Sieben, E.** 2008. *WET-Rehab Plan: Guidelines for planning wetland rehabilitation in South Africa*. Report TT 336/08 to the Water Research Commission, South Africa.

**Sieben, E.J.J., Kotze, D.C., Ellery, W.N. & Russell, W.** 2008. *Using vegetation in wetland rehabilitation* (Chapter 6). In *WET-Rehab Methods: National Guidelines and methods for wetland rehabilitation*, edited by W. Russel. Report TT 341/08 to the Water Research Commission, South Africa.