



Research associate profile: Dr A Morris

01/08/2023

Research associate profile

Dr Morris is an ICFR research associate providing mentorship input, specialist advice, business development support and contribution to productive output, including co-authoring of scientific papers. He has been involved in research supporting sustainable industrial wood plantation production for more than 35 years, leading multi-disciplinary research teams in Swaziland, Sappi and at the ICFR. He has been involved in several forestry feasibility studies in Africa, South America, China, and Southeast Asia. Industry roles have included Chairman of the Advisory Board for the Camcore International Tree Improvement Cooperative at North Carolina State University (2003-2011), Leader of the Forestry South Africa funded 'South African Pitch Canker Control Programme' (2010-2014) and Editor-in-Chief for Southern Forests: A Journal of Forest Science (2011-2018).

Research Gate: <https://www.researchgate.net/profile/Andrew-Morris>

ORCID: <https://orcid.org/0000-0001-6837-0022>

Publication Record

ICFR Reports

Morris AR. Genetic gain measured in a *Eucalyptus dunnii* seed source trial. *ICFR Report TR2021/902/02.*

Morris AR. Genetic gain measured in a *Eucalyptus macarthurii* seed source trial. *ICFR Report TR2021/902/01.*

Sivparsad BJ, Germishuizen I, **Morris AR.** 2020. Reducing the economic impact of the eucalypt snout beetle in South Africa. *ICFR report TRC2020/303/03.*

Sivparsad BJ, Germishuizen I, Conlong DE, Webster T. **Morris, AR.** 2020. White grub pot trials and monitoring: a summary of research findings with practical recommendations. *ICFR report TRC2020/303/02.*

Sivparsad BJ, Germishuizen I, Conlong DE, Webster T, **Morris AR.** 2020. Abundance and diversity of white grubs in KwaZulu-Natal: results of the 2017-2019 monitoring programme. *ICFR report TRC2020/303/01.*

Sivparsad BJ, Nxumalo TP, Germishuizen I, **Morris AR.** 2018. Insights into the epidemiology of wattle rust (*Uromycladium acaciae*) in South Africa: results of the 2015-2017 monitoring programme. *ICFR Technical Note 08/2018.*

Sivparsad BJ, Germishuizen I, Conlong DE, Webster T, **Morris AR.** 2018. Abundance and diversity of white grubs in KwaZulu-Natal: interim results of the 2017-2018 monitoring programme. *ICFR Technical Note 03/2018.*

Nxumalo T, **Morris AR**, Germishuizen I. 2017. Quantifying the impact of *Uromycladium acaciae* (wattle rust) on black wattle (*Acacia mearnsii*) growth and productivity. *ICFR Technical Note 14/2017*.

Peerbhay KY, Germishuizen I, **Morris A**, Ismail R. 2017. Spatial technologies for mapping baboon-related damage in commercial pine plantations of the Mpumalanga province, South Africa. *ICFR Technical Note 06/2017*.

Morris AR. 2016. Planting stock type influences final yield of *Eucalyptus smithii* pulpwood crop. *ICFR Technical Note 3/2016*.

Peer-reviewed Publications

Ferreira R, Peerbhay K, Louw J, Morris A, Germishuizen I, **Morris A**, Lottering R. 2023. A Tree Level analysis of baboon damage in commercial forest stands using deep learning techniques. *Southern Forests 2023*, 85(2): 01-0 <https://doi.org/10.2989/20702620.2023.2199164>.

Cooper G, **Morris A**, Botha G, Titshall L, R Burgdorf, Rozanov A. 2023. The role of landscape and parent material on regolith under timber plantations at Highflats, KwaZulu-Natal, South Africa. *Journal of Geoderma Regional*. 2023 (32), <https://doi.org/10.1016/j.geodrs.2023.e00608>.

Morris AR. 2022. Changing use of species and hybrids in South African forest plantations. *Southern Forests 84*(3): <https://doi.org/10.2989/20702620.2022.2110538>.

Ferreira R, Peerbhay K, Louw J, Germishuizen I, **Morris AR**, Ismail R. 2022. A spatio-temporal analysis of baboon damage using Sentinel-2 imagery and Extreme Gradient Boosting. *Geocarto International 37*: 2931-2943 <https://doi.org/10.1080/10106049.2020.1837259>.

Ismail R, Crous J, Sale G, **Morris AR**, Peerbhay K. 2021. Developing a satellite-based frost risk model for the Southern African commercial forestry landscape, *Southern Forests 83*:10-18.

Sivparsad BJ, **Morris AR**, Germishuizen I. 2020. Pot trial screening of chemical, biological and natural insecticides for the management of white grubs (Coleoptera: *Scarabaeidae*) during eucalypt and wattle establishment, *Southern Forests 82*:303-311.

Mavimbela LZ, Crous JW, **Morris AR**, Chirwa PW. 2018. The importance of harvest residue and fertiliser on productivity of *Pinus patula* across various sites in their first, second and third rotations, at Usutu Swaziland. *New Zealand Journal of Forestry Science 48*:5 <https://doi.org/10.1186/s40490-018-0110-1>

Little KM, Rolando CA, **Morris AR**. 2018. Impacts of under-canopy vegetation on stand growth in two pine saw-timber stands, South Africa. *New Zealand Journal of Forestry Science 48*:2 <https://doi.org/10.1186/s40490-017-0107-1>

Little KM, Ahtikoski A, **Morris AR**. 2018. Rotation-end financial performance of vegetation control on *Eucalyptus smithii* in South Africa. *Southern Forests 80*:241-250

Fourie G, Wingfield MJ, Wingfield BD, Jones NB, **Morris AR**, Steenkamp, ET. 2014. Culture-independent detection and quantification of *Fusarium circinatum* in a pine-producing seedling nursery. *Southern Forests: A Journal of Forest Science 76*(3):137-143.

Jones NB, Ford CM, Light ME, Nadel RL, Greyling I, Fourie G, Wingfield MJ, **Morris AR**. 2014. Effect on nursery and field performance of *Pinus patula* seedlings after inoculation with *Fusarium circinatum*. *Southern Forests: A Journal of Forest Science* 76(3):125-136

Morris AR, Fourie G, Greyling I, Steenkamp ET, Jones NB. 2014. Re-use of seedling containers and *Fusarium circinatum* association with asymptomatic *Pinus patula* planting stock. *Southern Forests: A Journal of Forest Science* 76(3):177-187

Crous JW, **Morris AR**, Scholes, MC. 2011. Investigating the utilization of potassium fertilizer in a *Pinus patula* Schiede Ex Schltdl. & Cham. Plantation. *Forest Science* 57:222-231

Crous JW, **Morris AR**, Khoza S. 2011. Changes in topsoil, standing litter and tree nutrient content of a *Pinus patula* plantation after phosphorus and potassium fertilization. *European Journal of Forest Research* 130:277-292.

Crous JW, **Morris AR**, Khoza S. 2009. Effect of weeding and fertilization on bark thickness and stem form of seven pine species on a low elevation site at Usutu, Swaziland. *Southern Forests* 71:215-225.

Crous JW, **Morris AR**, Scholes MC. 2009. Effect of phosphorus and potassium fertilizer on tree growth and dry timber production of *Pinus patula* on gabbro-derived soils in Swaziland. *Southern Forests* 71:235-243.

Crous JW, **Morris AR**, Scholes MC. 2009. Effect of phosphorus and potassium fertilizer on stem form, basic wood density and stem nutrient content of *Pinus patula* at various stem heights. *Australian Forestry* 69:100–120.

Morris AR. 2008. Realising the benefits of research in eucalypt plantation management. *Southern Forests* 70:119-129.

Crous JW, **Morris AR**, Scholes MC. 2008. Growth and foliar nutrient response to recent applications of phosphorus (P) and potassium (K) and to residual P and K fertilizer applied to the previous rotation of *Pinus patula* at Usutu, Swaziland. *Forest Ecology and Management* 256:712-721.

Hurley BP, Slippers B, Croft PK, Hattingh HJ, van der Linde M, **Morris AR**, Dyer C, Wingfield MJ. 2008. Factors influencing parasitism of *Sirex noctilio* (Hymenoptera: Siricidae) by the nematode *Deladenus siricidicola* (Nematoda: Neotylenchidae) in summer rainfall areas of South Africa. *Biological Control* 45:450-459

Crous JW, **Morris AR**, Scholes MC. 2007. Effects of residual phosphorus and potassium fertilizer on organic matter and nutrients in a *Pinus patula* plantation. *Australian Forestry* 70:200-208

Crous JW, **Morris AR**, Scholes MC. 2007. The significance of residual phosphorus and potassium fertilizer in countering yield decline in a fourth rotation of *Pinus patula* in Swaziland. *Southern Hemisphere Forestry Journal* 69:1-8

Carlson CA, Allen R, **Morris AR**. 2004. Effects of temperature on *Pinus patula* seedlings growing in pots in a controlled environment. *Southern African Journal of Forestry* 200:27-38.

Morris AR. 2003. Site and stand age effects on fertilizer responses in *Pinus patula* pulpwood plantations in Swaziland. *Southern African Journal of Forestry* 199:27-40.

Clarke CRE, **Morris AR**, Palmer ER, Barnes RD, Baylis WBH, Burley J, Gourlay ID, O'Brien E, Plumptre RA, Quilter AK. 2003. Effect of environment on wood density and pulp quality of five pine species grown in Southern Africa. *Tropical Forestry Papers 43, Oxford Forestry Institute 162 pages.*

Clarke CRE, Barnes RD, **Morris AR**. 2003. Effect of environment on wood density and pulping of five pine species grown in southern Africa. *TAPPSA Journal*, May 2003 Paper presented at TAPPSA conf. 'Adding value in a global industry', Durban, South Africa, October 2002

Morris AR, Smith CW. 2002. Growth and yield as an indication of sustainable forest management in industrial plantations. *Southern African Journal of Forestry 195:47-55*

Pallett RN, Stanger TK, **Morris AR**, Clarke CRE. 2001. Operational deployment of genetic gain. *Southern African Journal of Forestry 190:53-59*

Morris AR, Pallett RN. 2000. Site requirements and species matching: Pines. In *D.L. Owen South African Forestry Handbook Vol 1:80-84. Southern African Institute of Forestry, Pretoria, RSA.*

Allan R, **Morris AR**, Carlson C. 2000. Survival and early growth effects of some re-establishment practices with *Pinus patula*. *Southern African Journal of Forestry 187:29-36.*

Barnes RD, Plumptre RA, Quilter TK, **Morris AR**, Burley J, Palmer ER. 1999. The use of stem dissection to sample trees of different ages for determining pulping properties of tropical pines. *IAWA Journal 20:37-43*

Shaw MJP, Clarke CRE, Pallett RN, **Morris AR**. 1997. Differentiating timber to optimize the pulping process. *Appita Journal 51:456-460*

Morris AR, Palmer ER, Barnes RD, Burley J, Plumptre RA, Quilter A. 1997. The influence of felling age and site altitude on pulping properties of *Pinus patula* and *Pinus elliottii* grown in the Usutu Forest, Swaziland. *Tappi Journal 80:133-138.*

Morris AR. 1997. Five-year results from a blanking trial with *Pinus patula*. *Southern African Journal of Forestry 178:1-7.*

Morris AR. 1995. Forest floor accumulation, nutrition and productivity of *Pinus patula* in the Usutu Forest, Swaziland. *Plant and Soil 168-169:271-278.*

Evans J, **Morris AR**, Masson PH. 1993. Sustainable management of pine pulpwood plantations in the Usutu Forest, Swaziland. *Proceeding's 14th Commonwealth Forestry Conference, Malaysia*

Morris AR. 1993. Forest floor accumulation under *Pinus patula* in the Usutu Forest, Swaziland. *Commonwealth Forestry Review 72:114-117.*

Morris AR. 1992. Dry matter and nutrients in the biomass of an age series of *Pinus patula* plantations in the Usutu Forest, Swaziland. *South African Forestry Journal 163:5-12.*

Pallett RN, **Morris AR**. 1990. Soil, terrain and climate as determinants of site quality in the Usutu Forest. *Proc. 1990 meeting of Soil Science Society of Southern Africa.*

Morris AR. 1988. The early growth of *Pinus oocarpa* and *Pinus patula* ssp. *tecunumanii* provenances in the Usutu Forest, Swaziland. Proc. IUFRO Conf. "Breeding tropical trees" Thailand. Ed Gibson, Griffen & Matheson p377-378

Morris AR. 1988. Interaction between managers and researchers in the conduct of applied forestry research. Proc. Workshop "Forestry management and research - partners into the 21st Century" Southern African Institute of Forestry, Pietermaritzburg, R.S.A. p49-51

Donald DGM, Lange PW, Schutz CJ, **Morris AR.** 1987. The application of fertilizer to pines in southern Africa. Southern African Journal of Forestry 141:53-62

Morris AR. 1984. International provenance trial of *Pinus kesiya* at age ten years in the Usutu Forest, Swaziland. Proc. IUFRO Conference "Provenance and genetic strategies in tropical forests." Zimbabwe. Ed. Barnes & Gibson p362-367

Morris AR. 1984. A comparison of soil nutrient levels under grassland and two rotations of *Pinus patula* in Swaziland. Proc. IUFRO Symposium, "Site and productivity of fast grown plantations", South Africa. Ed. Grey, D.C. et al 2:881-892

Student Supervision

Cooper G (PhD., 2018-2023), The nutrient supply potential of regolith under a *Eucalyptus* plantation at Highflats, South Africa. Stellenbosch, Supervisors: Rozanov A, Burgdorf R, **Morris A.**