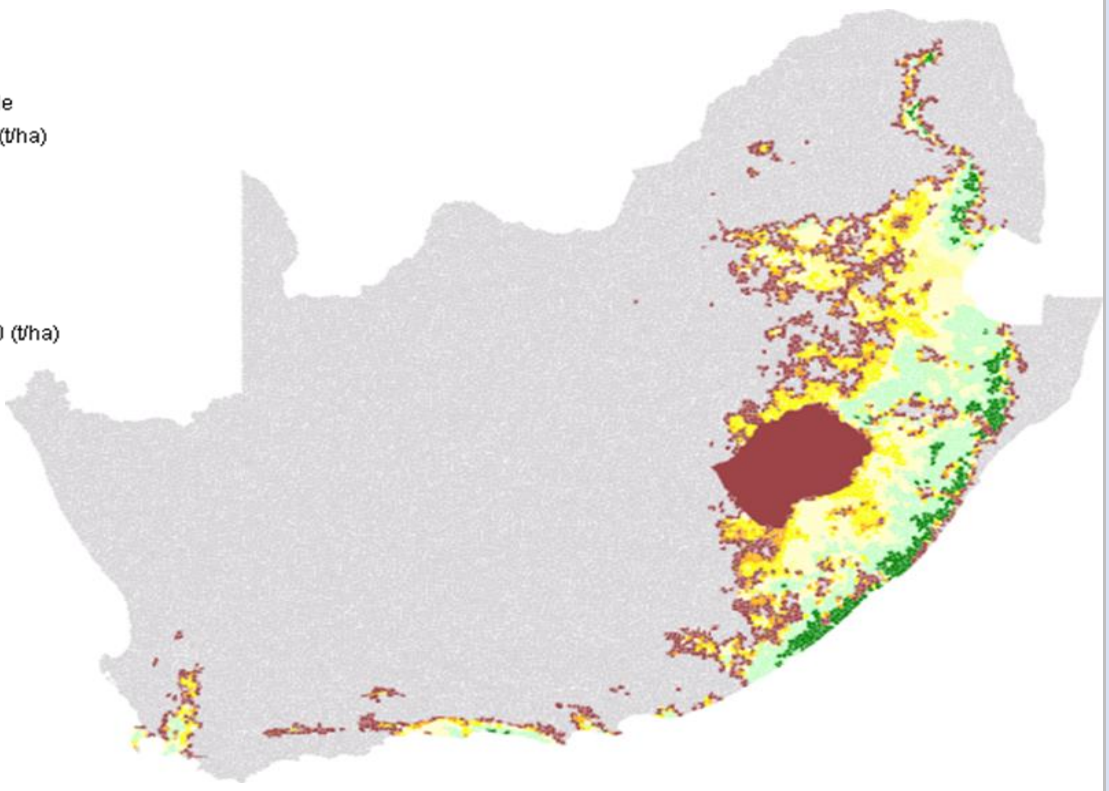
THEME: PLANNING YIELD POTENTIALS	Prepared by: Wim Hugo, SAEON

Pinus patula Yield Estimation

Legend

Pinus patula
Yield Estimation

- Climatically Unsuitable
- 0.000001 - 10.00000 (t/ha)
- 10.00001 - 12.00000
- 12.00001 - 14.00000
- 14.00001 - 16.00000
- 16.00001 - 18.00000
- 18.00001 - 20.00000
- 20.00001 - 100.00000 (t/ha)



Author(s): Derived from Schulze, R.E and Maharaj, M (2007)

Date: 2007

Meta-Data

Title	*Pinus patula yield estimation allocated to mesozones*
File Name	*Join_meso_base_and_mai_ppa_int_pt.shp*
Author(s)	*Derived from Schulze, R.E and Maharaj, M (2007)*
Publication Date	*2007*
Citation	Schulze, R.E. and Maharaj, M. 2007. *Pinus patula* Growth Areas and Yield Estimation. In: Schulze, R.E. (Ed). 2007. South African Atlas of Climatology and Agrohydrology. Water Research Commission, Pretoria, RSA, WRC Report 1489/1/06, Section 18.7.
License	*Creative Commons 4.0 BY SA (No restrictions on re-use, proper citation and attribution require*

Abstract	**The dataset shows climatically optimum growth areas and yield estimates of Pinus patula allocated to mesozones. Yield estimates were derived from Schulze R.E. and Maharaj M. (2007) and then allocated to mesozones by combining with a base mesozone layer obtained from the CSIR Geospatial Analysis Platform (GAP).* **Climatically optimum growth areas of P. patula occur in an arc inland of the coast from the northeast areas of the Eastern Cape, through KwaZulu-Natal and including a strip along this province's border with Lesotho and the Free State, the western third of Swaziland and into Mpumalanga. The major constraint on the inland side of this arc is a lack of rainfall, while on the coastal side of the arc temperatures are too high.* **Mean Annual Increments of P. patula, at> 20 t/ha/annum, are highest in an arc coastwards of the climatically optimum areas, where the trees tend to be vulnerable to heat related diseases. Away from the coast MAIs drop off into the 16 - 20 t/ha/annum range.*
Keywords	*agriculture, biomass, growth areas, mesozones, pinus patula, yield estimation*
Caveats	http://bea.dirisa.org/resources/metadata-sheets/WP03_00_META_PPA.pdf
Web Meta-Data	
Web Resource	http://app01.saeon.ac.za:8086/geoserver/BEA/wms?service=WMS&version=1.1.0&request=GetMap&layers=BEA:Join_meso_base_and_mai_ppa_int_pt&styles=&bbox=16.45192000002853,-34.83416989569373,32.89253174669768,-22.12503000000106&width=512&height=395&srs=EPSG:4326&format=application/openlayers

Methodology/ Protocol

Processing/ Provenance	*As described above*

Important Attributes

MESO_ID	Meso-zone ID
AVG_GRID_C	*Pinus patula* yield estimates, t/ha

References and Sources

[1]	Base Mesozone Dataset: http://196.21.191.61:8085/geoserver/GAP/wms?service=WMS&version=1.1.0&request=GetMap&layers=GAP:meso_2010_base_wgs84&styles=&bbox=16.4519200000285,-34.8341698956937,32.8925317466977,-22.1250300000011&width=512&height=395&srs=EPSG:4326&format=application/openlayers
[2]	Geospatial Analysis Platform. 2015. GAP. [ONLINE] Available at: http://www.gap.csir.co.za/. [Accessed 30 March 2015].
[3]	*Pinus patula* Yield Estimates: http://app01.saeon.ac.za:8085/geoserver/GAP/wms?service=WMS&version=1.1.0&request=GetMap&layers=GAP:Join_meso_base_and_mai_ppa_int_pt&styles=&bbox=16.4519200000285,-34.8341698956937,32.8925317466977,-22.1250300000011&width=512&height=395&srs=EPSG:4326&format=application/openlayers
[4]	Schulze, R.E. and Maharaj, M. 2007. *Pinus patula* Growth Areas and Yield Estimation. In: Schulze, R.E. (Ed). 2007. South African Atlas of Climatology and Agrohydrology. Water Research Commission, Pretoria, RSA, WRC Report 1489/1/06, Section 18.7.