## Sunflower Seed Yield Estimation

Legend

Sunflower Seed Yield

- Climatically Unsuitable
- 0.000001 - 1.000000 (t seed/ha/season)
- 1.000001 - 1.500000
- 1.500001 - 2.000000
- 2.000001 - 2.500000
- 2.500001 - 3.000000
- 3.000001 - 50.00000 (t seed/ha/season)

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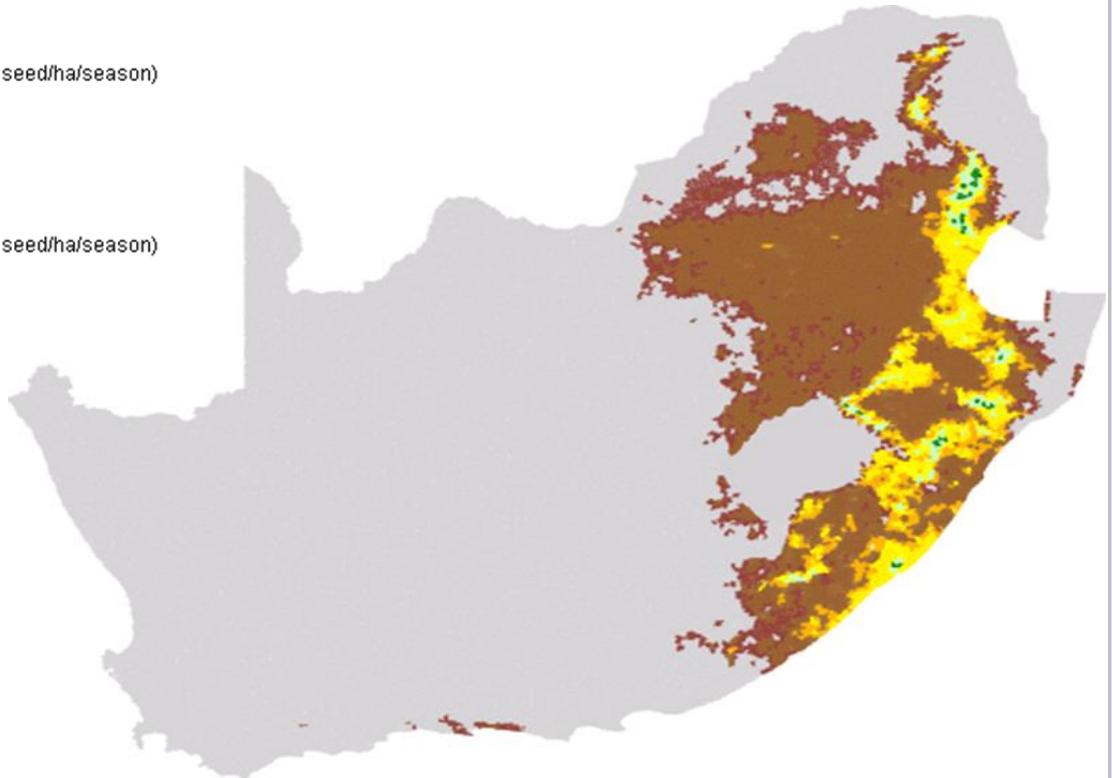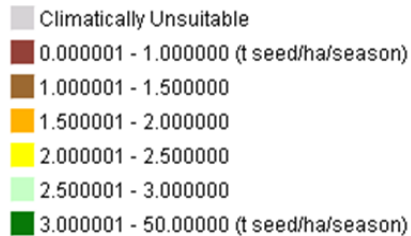
Author(s): Derived from Schulze, R.E and Maharaj, M (2007)

Date: 2007

Meta-Data

Title	*Sunflower Seed Yield Estimates per mesozone*
File Name	*Join_meso_base_and_yld_sunfl_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. Sunflower Seed 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 16.5.
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Abstract	*The dataset shows sunflower seed yield estimates 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).* *The map shows that the majority of production areas of sunflower seed in the Free State and North West should, according to Smith's (1994;1998) climatic criteria, yield 1.0-1.5 t/ha annually. The map furthermore shows that there are patches in Mpumalanga, Swaziland, KwaZulu-Natal and the Eastern Cape where in excess of 3 t/ha could, climatically, be achieved.* *Using Smith's (1994; 1998) climatic criteria, yields of sunflower seed are estimated using the effective rainfall for October to March and heat units (base 10°C) for the same period, with modifications to yields made for soil properties and levels of management.*
Keywords	agriculture, crops, mesozones, sunflower, yield estimation
Caveats	http://bea.dirisa.org/resources/metadata-sheets/WP03_00_META_SFL.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_yld_sunfl_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	Sunflower seed 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]	Schulze, R.E. and Maharaj, M. 2007. Sunflower Seed 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 16.5.
[4]	Sunflower Seed Yield Estimation: http://196.21.191.61:8082/geoserver/BEEH_grid/wms?service=WMS&version=1.1.0&request=GetMap&layers=BEEH_grid:yld_sunflower&styles=&bbox=16.458333,-34.841667,32.908333,-22.141667&width=512&height=395&srs=EPSG:4326&format=application/openlayers