DEPARTEMENT VAN LANDBOU-TEGNIESE DIENSTE
DEPARTMENT OF AGRICULTURAL TECHNICAL SERVICES
Sekretaris-W A Verbeek DSc Agric-Secretary

1:250 000 LANDTIPEREEKS

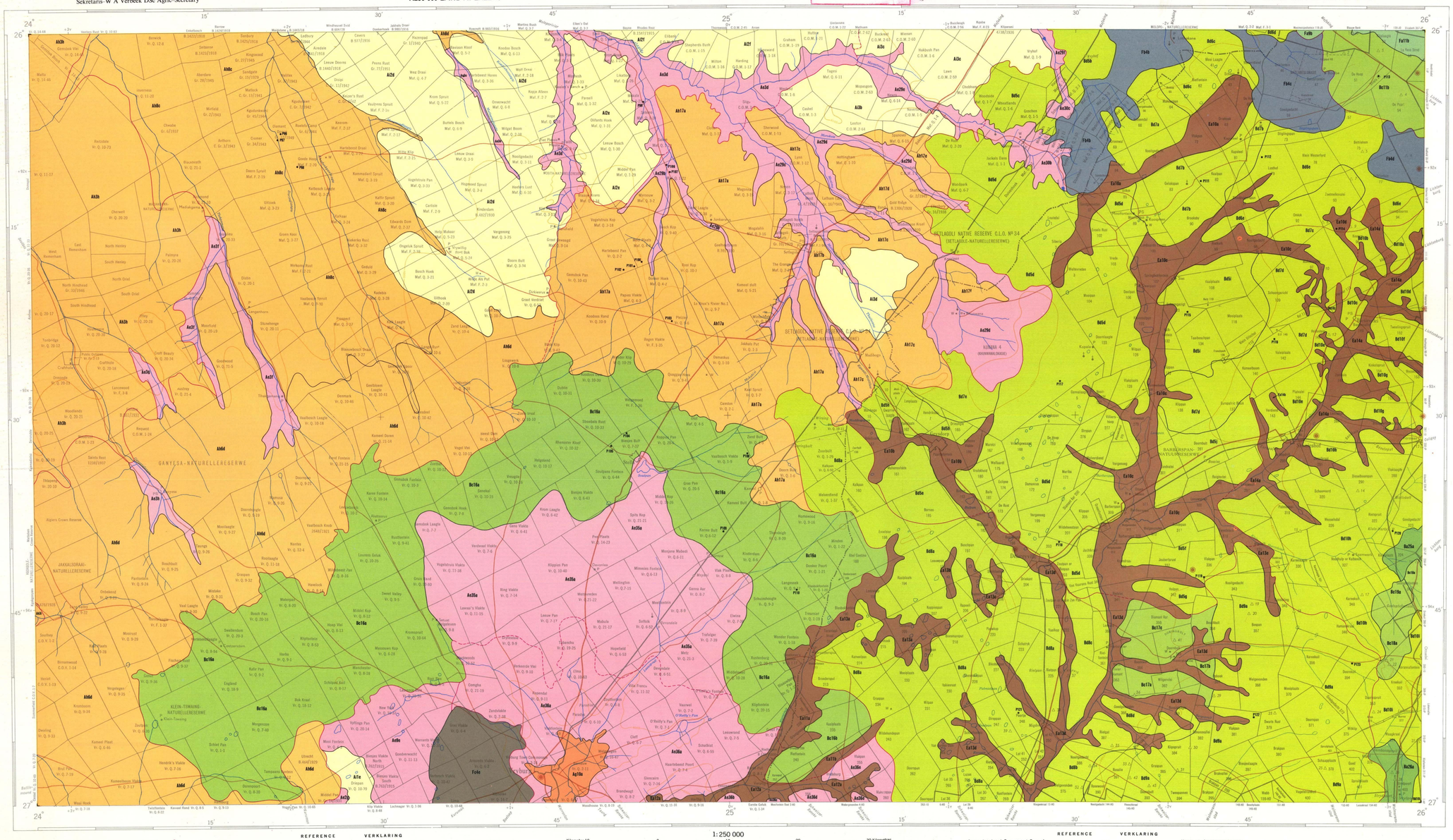
REPUBLIEK VAN SUID-AFRIKA — REPUBLIC OF SOUTH AFRICA

2624 VRYBURG

country : South Africa
subject : Soils
scale : 1:250.000
map ref. :
libr. ref. :

1:250 000 LAND TYPE SERIES

NAVORSINGSINSTITUUT VIR GROND EN BESPROEIING
SOIL AND IRRIGATION RESEARCH INSTITUTE
Direkteur-M C F du Plessis PhD-Director
6700 AJ Wageningen
The Netherlands



LEGENDE/LEGEND

BREÉ GRONDPATRONE/BROAD SOIL PATTERNS

ROOI-GEEL APEDALE, GOED GEDRENEERDE GRONDE
RED-YELLOW APEDAL, FREELY DRAINED SOILS

- Aa — Met 'n humiese horizon / With a humic horizon
- Ab — Rooi, distrofies en/of mesotrofies / Red, dystrophic and/or mesotrophic
- Ac — Rooi en geel distrofies en/of mesotrofies / Red and yellow dystrophic and/or mesotrophic
- Ad — Geel, distrofies en/of mesotrofies / Yellow, dystrophic and/or mesotrophic
- Ae — Rooi, hoë basestatus, > 300 mm diep (geen duine) / Red, high base status, > 300 mm deep (no dunes)
- Af — Rooi, hoë basestatus, > 300 mm diep (met duine) / Red, high base status, > 300 mm deep (with dunes)
- Ag — Rooi, hoë basestatus, < 300 mm diep / Red, high base status, < 300 mm deep
- Ah — Rooi en geel, hoë basestatus, gewoonlik < 15% klei / Red and yellow, high base status, usually < 15% clay
- Ai — Geel, hoë basestatus, gewoonlik < 15% klei / Yellow, high bane status, usually < 15% clay

PLINTIESE KATENA: HOOGLIGGENDE DUPLEKS- EN MARGALITIESE GRONDE SKAARS
PLINTHIC CATENA: UPLAND DUPLEX AND MARGALITIC SOILS RARE

- Ba — Distrofies en/of mesotrofies; rooi gronde wydverspreid / Dystrophic and/or mesotrophic; red soils widespread
- Bb — Distrofies en/of mesotrofies; rooi gronde nie wydverspreid / Dystrophic and/or mesotrophic; red soils not widespread
- Bc — Eutrofies; rooi gronde wydverspreid / Eutrophic; red soils widespread
- Bd — Eutrofies; rooi gronde nie wydverspreid / Eutrophic; red soils not widespread

PLINTIESE KATENA: HOOGLIGGENDE DUPLEKS- EN/OF MARGALITIESE GRONDE KOM ALGEMEEN VOOR
PLINTHIC CATENA: UPLAND DUPLEX AND/OR MARGALITIC SOILS COMMON

- Ca — Ongedifferensieerd / Undifferentiated

PRISMAKUTANIESE EN/OF PEDOKUTANIESE DIAGNOSTIESE HORISONTE DOMINANT
PRISMACUTANIC AND/OR PEDOCUTANIC DIAGNOSTIC HORIZONS DOMINANT

- Da — Rooi B horisonte / Red B horizons
- Db — B horisonte nie rooi / B horizons not red
- Dc — Bekomstig, een of meer van: vertiese, melaniese, rooi gestrukturde diagnostiese horisonte / In addition, one or more of: vertic, melanic, red structured diagnostic horizons

EEN OF MEER VAN: VERTIESE, MELANIESE, ROOI GESTRUKTUURDE DIAGNOSTIESE HORISONTE
ONE OR MORE OF: VERTIC, MELANIC, RED STRUCTURED DIAGNOSTIC HORIZONS

- Ea — Ongedifferensieerd / Undifferentiated

GLENROSA- EN/OF MESPANVORMS (onder gronde mag voorkom)
GLENROSA AND/OR MESPIM FORMS (other soils may occur)

- Fa — Kalk skaars of afwesig oral in die landskap / Lime rare or absent in the entire landscape
- Fb — Kalk skaars of afwesig in hooglopende gronde maar gewoonlik teenwoordig in laaglopende gronde / Lime rare or absent in upland soils but generally present in low-lying soils
- Fc — Kalk gewoonlik teenwoordig oral in die landskap / Lime generally present in the entire landscape

GRONDE MET 'N DIAGNOSTIESE FERRIHUMIESE HORISON
SOILS WITH A DIAGNOSTIC FERRIHUMIC HORIZON

- Ga — Oorwegend diep (Lamotteworm) / Predominantly deep (Lamotte form)
- Gb — Oorwegend vlak (Rhowhoeksorm) / Predominantly shallow (Rhowhoek form)

GRYS REGIESE SANDE
GREY REGIC SANDS

- Ha — Regiese sande dominant / Regic sands dominant
- Hb — Regiese sande en ander gronde / Regic sands and other soils

DIVERSE LANDKLASSE
MISCELLANEOUS LAND CLASSES

- Ia — Ongedifferensieerde diep afsettings / Undifferentiated deep deposits
- Ib — Rotsgebiede met diverse gronde / Rock areas with miscellaneous soils
- Ic — Rots met min of geen grond / Rock with little or no soil

Landtipe-opname gedoreende 1973 deur J F Eloff MSc Agric (UOVS), A T P Bennie MSc Agric (UOVS), R W Bruce BSc Hons (PU vir CKO) en J L Schoeman MSc (PU vir CKO)

Leier van die nasionale landtipe-opname: C N MacVicar PhD (Natal)
Assistent-leier: J F Eloff MSc Agric (UOVS)

Hulp met makroklimaatkartering: J G Dry en verskeie wetenskaplikes van die Departement van Landbou-tegniese Dienste

Landtipe-sonering deur J F Eloff MSc Agric (UOVS), A T P Bennie MSc Agric (UOVS), R W Bruce BSc Hons (PU for CKO) and J L Schoeman MSc (PU for CKO)

Leader of the national land type survey: C N MacVicar PhD (Natal)
Assistant leader: J F Eloff MSc Agric (UOVS)

Assistance with macroclimate mapping: J G Dry and various scientists of the Department of Agricultural Technical Services

Landtipe-grens wat 'n makroklimaatsonegrens plus 'n terreinvorm en/of pedologiese grens is
Land type boundary that is a macroclimate zone boundary plus a terrain form and/or pedological boundary

Landtipegrens wat slegsmal 'n makroklimaatsonegrens is
Land type boundary that is only a macroclimate zone boundary

Landtipegrens wat 'n terreinvorm en/of pedologiese grens is
Land type boundary that is a terrain form and/or pedological boundary

Land type survey during 1973 by J F Eloff MSc Agric (UOFS), A T P Bennie MSc Agric (UOFS), R W Bruce BSc Hons (PU for CHE) and J L Schoeman MSc (PU for CHE)

Leader of the national land type survey: C N MacVicar PhD (Natal)
Assistant leader: J F Eloff MSc Agric (UOFS)

Assistance with macroclimate mapping: J G Dry and various scientists of the Department of Agricultural Technical Services

Oppervlakte gekarteer / Area mapped: 2 209 000 ha

Modale profiele op hierdie kaart / Modal profiles on this map: P96–P123

Ae7g — Dui gedeelte g van landtipe Ae7 aan / Indicates portion g of land type Ae7

LET WEL
Verslag oor hierdie kaart verkrygbaar van: Direkteur, Afdeling Landbou-inligting, Departement van Landbou-tegniese Dienste, Pretoria

NOTE
Report on this map obtainable from: Director, Division of Agricultural Information, Department of Agricultural Technical Services, Pretoria

Gebaseer op 1° x 2° velle van die Topo-kadastrale Reeks, skaal 1:250 000, van die Direkteur-generaal van Opmetings
Op kontrak geteken vir die Navorsingsinstituut vir Grond en Besproeiing, Pretoria
Gedruk deur die Staatsdrukker, Pretoria, 1978
Eksemplare verkrygbaar van die Staatsdrukker, Pretoria en Kaapstad
Verslag oor hierdie kaart verkrygbaar van: Direkteur, Afdeling Landbou-inligting, Departement van Landbou-tegniese Dienste, Pretoria
Based on 1° x 2° sheets of the Topo-cadastral Series, scale 1:250 000, of the Director-General of Surveys
Drawn under contract for the Soil and Irrigation Research Institute, Pretoria
Printed by the Government Printer, Pretoria, 1978
Copies obtainable from the Government Printer, Pretoria and Cape Town
Report on this map obtainable from: Director, Division of Agricultural Information, Department of Agricultural Technical Services, Pretoria

KOPIEREG — COPYRIGHT

PRYS — PRICE
Plaaslik R2,60 Local
Buitelands R3,25 Other Countries

REFERENCE — VERKLARING

- Boundaries, International — Grense, Internasionale
- " Provincial — " Provinsiale
- Magisterial District Boundaries — Landdrosdistrikgrewe
- Scheduled Bantu Areas (Act No.27 of 1913, as amended) — Ingelyste Bantoegebiede (Wet No.27 van 1913, soos gewysig)
- Released Areas (Act No.18 of 1936, as amended) — Ooggestelde Gebiede (Wet No.18 van 1936, soos gewysig)
- Game and Botanical Reserves — Wildtuine en Botaniese Reserwes
- Forest Reserves — Boreseerwes
- Railways — Spoorwêg
  - " Narrow Gauge — " Smalspoor
- Roads, National — Pasie, Nasionale
  - " Main — " Hoof
  - " Secondary — " Sekondêre
  - " Other — " Ander

1:250 000

Kilometers 10 0 10 20 30 Kilometres
Myl 10 5 0 5 10 15 Miles

Magnetic declination (1962-0) at centre of sheet is 18°20' West of True North. Annual change 1' Westwards.

Gauss Conform Projection. Central Meridian 25° East.
The grid lines of the South African Co-ordinate System are indicated in the margin by short lines at 100,000 Cape Foot intervals, with the co-ordinate values in units of 100,000 Cape Feet.

Magnetiese deklinasie (1962-0) in middel van vel is 18°20' Wes van Ware Noorde. Jaarlikse verandering 1' Weswaarts.

Gauss se Konforme Projeksie. Middelmeridiaan 25° Ost.
Die rutelyne van die Suid-Afrikaanse Koördinaatstelsel word in die kantruimte angetoon deur kort lyne, 100,000 Kaapse Voet van mekaar, met die koördinaatwaardes in eenhede van 100,000 Kaapse Voet.

REFERENCE — VERKLARING

- Crown Land and Government Ground — Kroon- en Goewermentsgronde
- Open Ground — " Oop Gronde
- Trig. Beacons with Number — Driehoeksbakens met Nommer
- Mission Stations — Sendingstasies
- Post Offices, Police Stations and Stores — Poskantore, Polisiestasies en Winkels
- Mines and Historical Mouuments — Myne en Historiese Monumente
- Rivers and Dams — Riviere en Damme
- Marshes or Vleis — Moerasse of Vleie
- Pans and Lakes — Panne en Mere
- Wairs, Pipelines and Canals — Studamme, Pyplyne en Kanale
- Contours (vertical interval 500 E. Ft.) — Hoogtelyne (vertikale tussenruimtes 500 E. Voet)
- Hill Features not shown by contours — Heuwelkenmerke nie deur hoogtelyne aangedui nie.
- Sand and Sand Dunes — Sand en Sandduine
- Aerodromes and Marine Lights — Vliegvelde en Marinelights

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2722 KURUMAN	2724 CHRISTIANA	2726 KROONSTAD

ISRIC - WAGENINGEN
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