

D. DURICRUSTS

Field Note D4a9. Pedogenic silcretes – I. Hilltop silicified shale castles



Silicified shale castle (on Muurkraal Farm).

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Overview

This Field Note describes the morphological characteristics of silicified shales on hilltops. The shales do not comprise laminae but appear as thick layers. These calcified layers were resistant to erosion and survived, and now protrude the surface, in places nearly vertically. Some of these castles, up to 30 m long, emerge out of the ground to a height of up to 6 m are conspicuous and can be seen from a distance. Most of the castles are heavily ferruginised

On Muurkraal Farm

The silicified shales on Muurkraal Farm, form prominent features, which are also highly ferruginised. They are the most spectacular of their kind in the Study Area (Figures 1 to 6).



Figure 1. Satellite image of the silicified shale castle and strata ('walls'), which protrude a hilltop on Muurkraal Farm. Black arrow points to a group of 'walls'. Yellow and white arrows point to individual 'walls'.



Figure 2. Top and bottom: the monumental group of 'walls'. Views from the north. See also the header photograph.



Figure 3. Silicified shale 'walls' protrude the hilltop on Muurkraal Farm. Silcrete boulders are present around the castle.



Figure 4. 'Wall' of silicified shale on the farm Muurkraal. Views on the south face of the wall: top - from the east; bottom – from the west.



Figure 5. The north face of the wall shown in Figure 6.



Figure 6. Eroded, lower 'walls', a short distance from the wall shown above.

Malgaskop

The silicified shales on Malgaskop, on Swartdam Farm, form prominent features, which are also highly ferruginised. They are spectacular and can be seen from a distance (Figures 7 to 9).



Figure 7. Satellite image of the silicified shale castle (yellow arrow) and strata and an individual 'wall', white arrow), which protrude a hilltop on Swartdam Farm.



Figure 8. Top and bottom: Malgaskop silicified shale castle, 1.2 km south of Pilgrim Garden castle. Silcrete boulders are present around the castle.



Figure 9. Top and bottom: 'walls' of the Malgaskop silicified shale castle.