

5.2.2. Soil depth and stoniness

Soil depth and the related attribute, stoniness, are important management properties, since they determine the feasibility of mechanization and the soil

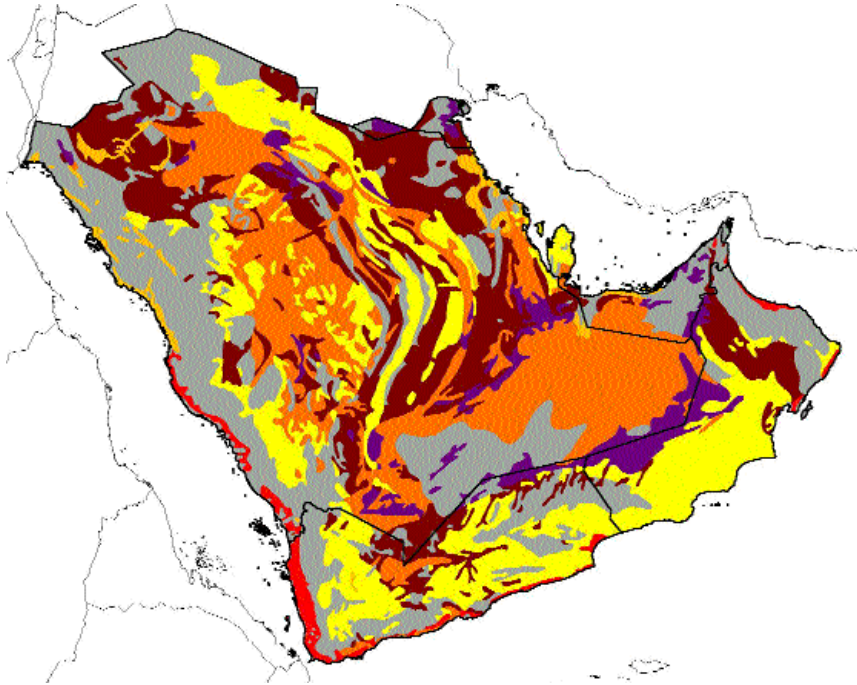


Fig. 36: Distribution of coarse-textured soils(Note: for legend see Fig. 34)

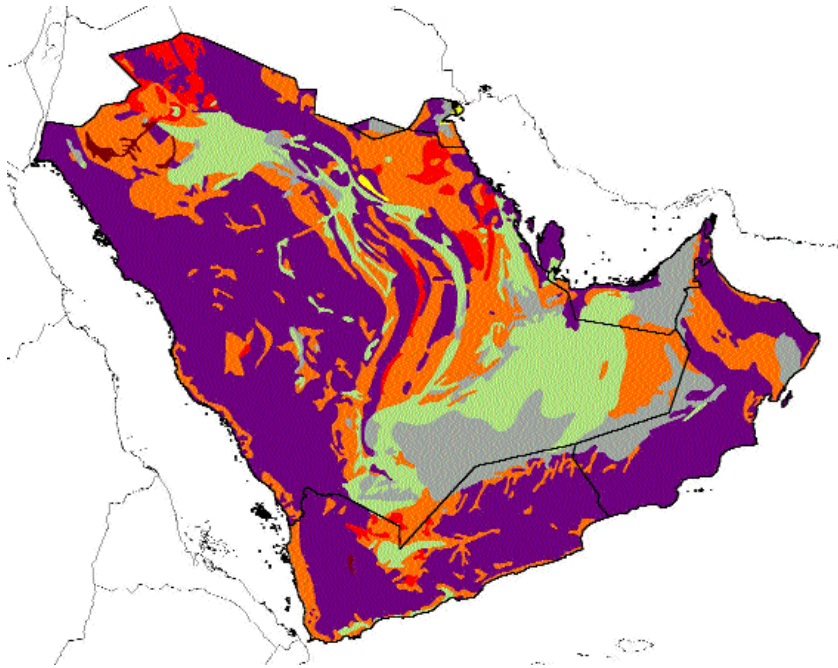


Fig 37: Distribution of medium-textured soils(Note: for legend see Fig. 34)

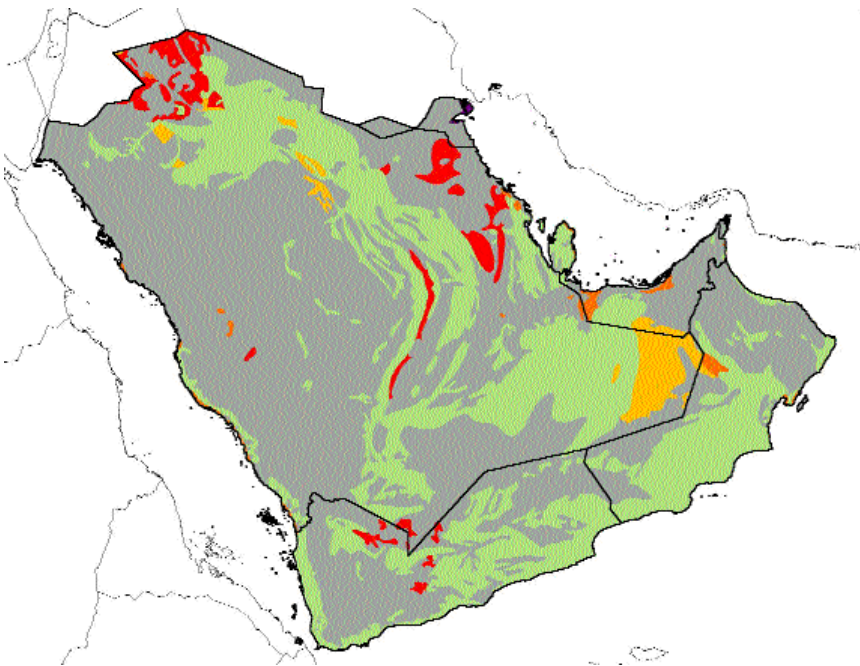


Fig 38: Distribution of fine-textured soils(Note: for legend see Fig. 34)

moisture storage capacity. Very shallow or stony soils do not have sufficient soil volume in which to store moisture, and therefore dry out more rapidly than deep soils, or soils of similar depth without stones. For the same reason, these soils have more difficulty absorbing rainfall during storms and thus generate much runoff.

The distribution of soil depth and related attributes are shown in Figures 39-41. The map of the dominant soil depth (Figure 39) is an oversimplification, but shows a clear pattern. Mountain areas are invariably associated with high levels of shallow (Figure 40) and stony soils (Figure 41). They occur mainly in the western highlands of the Midian, Hejaz, and Asir, the escarpment of the Yemen high plateau, and the Hajar and Mussandam mountains in Oman. In addition, there are interspersed but fairly large areas of gravel plains throughout the Peninsula. The most important ones occur in eastern Kuwait and south of the Hajar mountains.