

Uncommon minerals in gemstone quality from Tanzania

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During a field trip to East African with Werner Spaltenstein (Chantaburi), the first author had the chance to visit several deposits and trading places. Beside of the commercial gemstones known from this area, repeatedly uncommon minerals are found in gemstone quality. They are presented here with their identification features. Although physical data can be measured easily, due to overlapping with other minerals a safe identification requires often more scientific equipment than usually available for traditional gemologists. Some of the stones are found in their parent rock and their formation and origin is well documented. Others, however, stem from gemmy gravels, and their parent rocks were eroded hundreds of millions of years ago. These gravels were shed over a large area of former East Gondwana landmass. Later tectonic events have broken that treasure pot and it is now split into deposits in Tanzania, Madagascar and Sri Lanka. Secondary deposits may thus produce similar stones as pebbles of rare gem minerals in all three regions. In Tanzania primary deposits are producing gemstones as well as secondary deposits from old Gondwana treasury are worked. A few of these gemstones are presented here.



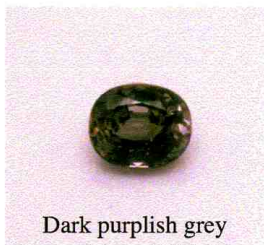
Grey to yellow and orange to brown chondrodite



Yellowish to brown clinohumite



light purple to dark musgravites (0.3-3.9 ct)



Dark purplish grey saphirine 0.93 ct



Yellow Diopside



light purple to dark taaffeite



Dark purplish grey dumortierite (cut: 1.18 ct)



XRD films of musgravite and taaffeite



Kornerupine up to 2.5 ct



White Peristerite Moonstone