

Classification of gem deposits of Sri Lanka

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Abstract

Approximately 25% of Sri Lanka's landmass is gem-bearing. Most of the gem deposits are located in restricted zones (approximately 15 000 sq km) within the area occupied by rocks of the Highland/Southwestern Complex. Over 90% of Sri Lanka's gem mining is from secondary placer deposits that can be classified as sedimentary gem deposits of residual, eluvial and alluvial types. Primary or in-situ gem occurrences are located mainly in contact-metamorphic zones comprising of skarn and calcium-rich rocks. Corundum occurrences have also been found in aluminous-rich, silica-deficient metasedimentary formations. Gem minerals that are frequently found in pegmatites within the Highland/Southwestern Complex include corundum, zircon, beryl, quartz varieties, feldspar and chrysoberyl. A special feature of many secondary gem deposits of Sri Lanka is their location on morphotectonically controlled sites.