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A FIELD CLASSIFICATION OF LOW VALUE CORUNDUM IN SRI LANKA

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Abstract: An attempt has been made to classify low value corundum including geuda stones that occur in Sri Lanka. It is a field classification and most of the terms used are familiar in the gem trade throughout Sri Lanka. The entire low value corundum range present in the country has been included in this classification. It is hoped that this may form the basis for further studies to arrive at a scientific form of classification for low value corundum.

Introduction

Sri Lanka has long been renowned for Gems.[1] Since the 1970s, Sri Lanka has also given considerable attention to heat treatment of the corundum family of gems. Although some progress has been made there is no evidence that the local trade is producing any significant volume of treated material. Buyers from Thailand export very large volumes of rough geudas every year through the official geuda trading floor in Ratnapura and dominate buying in the Batugedara area, which is the main geuda centre in Ratnapura.

This article is an attempt to classify low value corundum. Local persons involved in the gem trade use a number of terms when referring to uncut or rough stones. These terms have now been examined in great detail and the present study is the first systematic classification of low value corundum so far attempted. It is presumed that the classification would be of some value to all those interested in the Geuda trade, both local and foreign.

Background Information

There are a number of gemstones of the corundum variety occurring in Sri Lanka. These include the Blue Sapphire, Star Sapphire, Ruby, Star Ruby, Yellow Sapphire, Pink Sapphire, Golden Sapphire, Green Sapphire (rare) and White Sapphire. The local gem trade normally values a stone on the colour, intensity and brightness of the star in the case of star rubies and star sapphires. If the star effect is weak it is termed locally as 'Malukkan'. The presence of rutile crystalline bands,[2] clouds or opaque

white forms in the stone is termed 'Kowanguwa'. When the star effect could be seen it is termed 'Arunool Kowanguwa'. When the stone is devoid of this effect it is termed 'Geuda Kowanguwa'. In other words, corundum with an Arunool Kowanguwa is the star sapphire and star ruby, and one with a weak Arunool Kowanguwa is termed 'Malukkan'. Also stones containing 'Geuda Kowanguwa' are designated 'Geuda Stone'. Up to recent years the geuda stone was discarded as having no economic value. Other defects in corundum stones familiar to local gem trade include :

i. Multi coloured corundum - when there is a combination of the blue and red colours, a local term 'Deguna' is used.

ii. Uneven colour - this variety is termed as Ottu (inky patches).

iii. Dark Blue colour - this variety is a blue coloured stone. It is devoid of reflection.

iv. Dark stains - this type is termed 'Kahata stone'.

The above defects have been removed and stones have been treated for market acceptance. The technique is known mainly by gem traders in the southern parts of Sri Lanka. The gem traders from Thailand have initiated the heat treatment of the above named varieties of stones including others in the geuda range of stones that had been previously discarded.

Classification

The local gem trade classifies low value corundum into six categories. These are listed below.

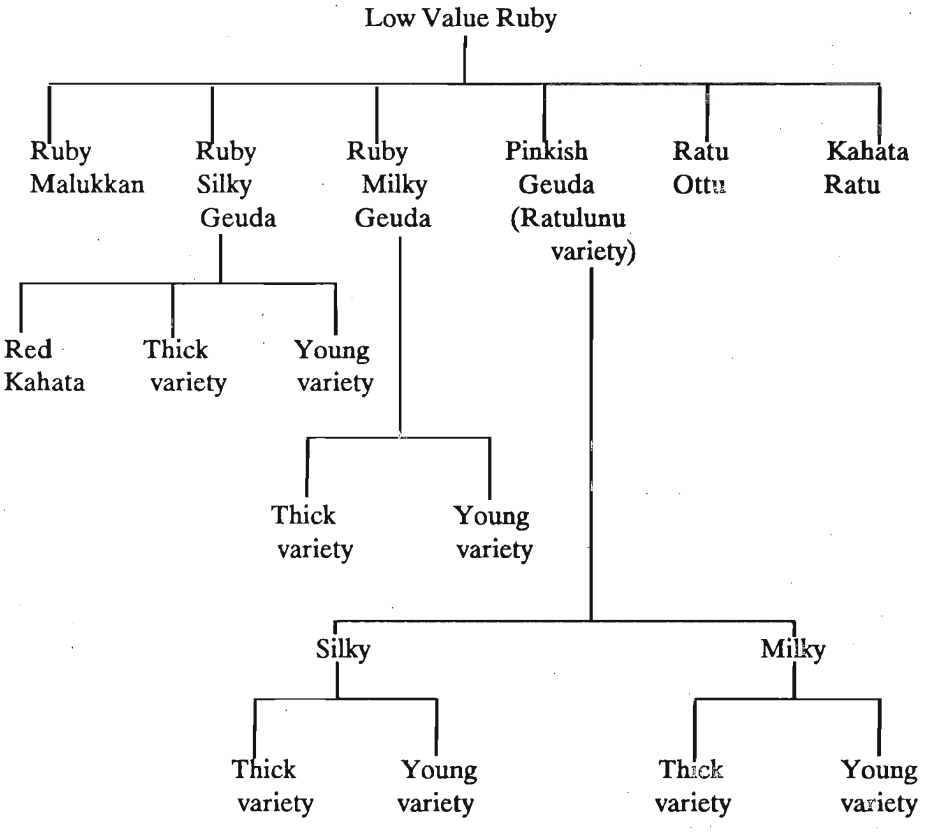
Low Value Corundum Classification:

i. Low value Ruby
ii. Yellow Corundum (Pushparaga)
iii. Multi coloured Corundum
iv. White Corundum
v. Blue Geuda
vi. Blue Ottu (Inky Blue)

i. Low Value Ruby

This category is divided into a number of varieties each being given a particular name (Figure 1).

Figure 1

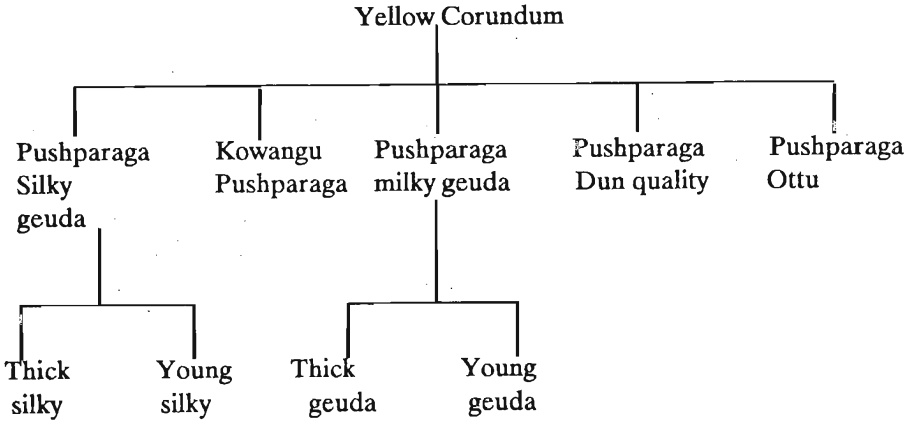


Ruby Malukkan is a star ruby with a weak star effect. The ruby silky geuda is classified into 3 categories, the Red Kahata Silky stone is dark brownish in colour, the thick variety is composed of a number of rutile crystals and is fairly cloudy and the young variety contains less rutile crystals and is also cloudy; this stone is however, fairly clear. The ruby milky geuda stones show milky clouds although the surface has no silky effect. The thick variety shows thick milky clouds whilst the thin variety exhibits less clouds, and is fairly transparent. The Pinkish geuda or Ratulunu variety (red onion) also contains crystalline bands of rutile and is cloudy. This variety is further classified with the silky thick and young variety and milky thick and young variety. The Ruby or Ratu Ottu is a variety which is stained with blue patches. The Kahata Ratu is a stone with dark brown stains.

ii. Yellow Corundum (Pushparaga)

The yellow corundum is divided into five main groups (Figure 2).

Figure 2

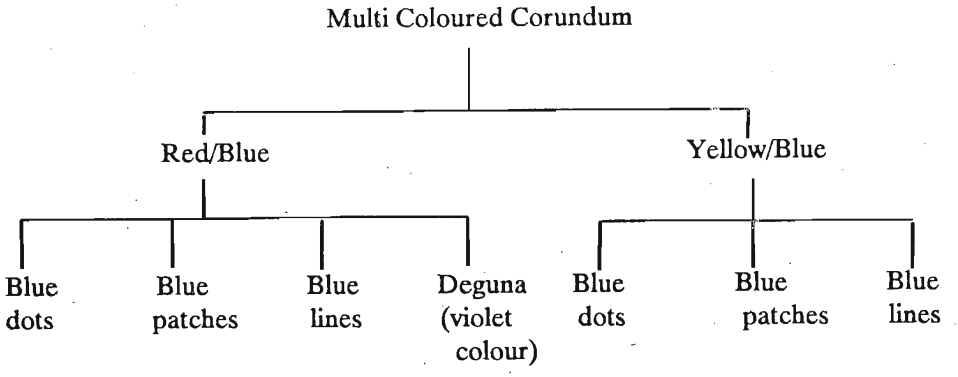


The low value yellow corundum is divided into 5 groups : The yellow silky variety is composed of rutile crystal layers and is further divided into a thick and young variety. In the Kowangu pushparaga, crystals of rutile are in patches or lines without a cloudy effect. The yellow milky geuda is composed of a milky cloudiness sometimes in patches which is again classified into thick milky or young milky stones. The Dun quality stone is composed of a bluish white smoky material inside the stone. The other variety contains blue colour patches within the stone.

iii. Multi Coloured Corundum

The multi coloured corundum may be classified as in Figure 3.

Figure 3

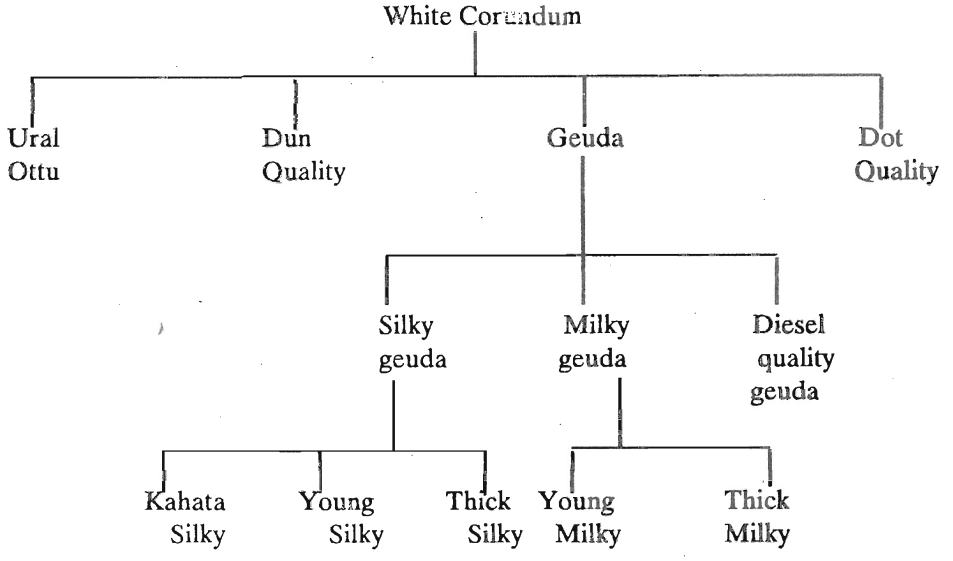


The multi coloured varieties are mainly the Blue/Red and Blue/Yellow stones. The Blue/Red stones are classified into 4 categories depending on the nature of the blue stain, they include blue dots, blue patches and blue lines, also in this group are the Deguna stones which are violet in colour. The Blue/Yellow varieties are similarly classified into 3 types - dots, patches and lines.

iv. White Corundum

The colourless varieties of corundum are classified as white sapphires (Figure 4).

Figure 4



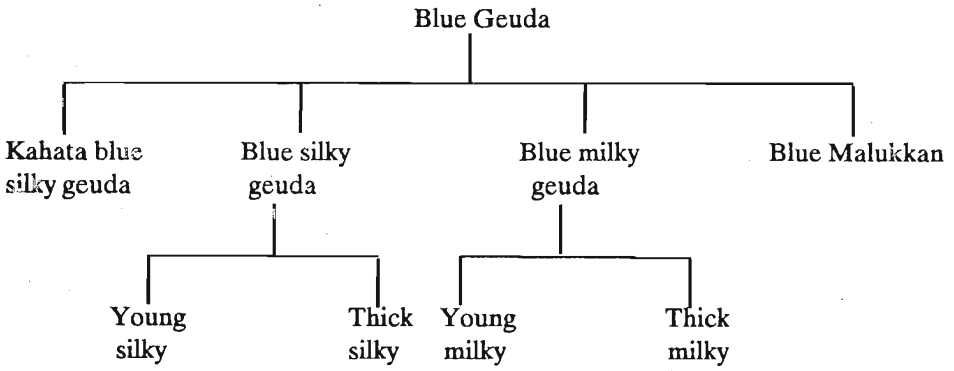
The Ural Ottu is characterized by the presence of a slight blue colouration on one surface. The Dun quality has a pale blue smoky appearance inside the stone. The geuda variety contains a white or pale blue cloudy or a banded effect inside the stone. These inclusions or the effect is termed geuda Kowanguwa. The dot quality contains very small or tiny blue dots inside the stone. The geuda variety is further divided into 3 groups - silky, milky and diesel qualities. The silky variety due to the presence of crystalline rutile bands exhibits a silky effect. The clear stones are called young silky geuda and the not too clear variety is termed thick silky. If the silky varieties show a dark brownish tint, it is called Kahata silky geuda. The milky geuda stones show a cloudy effect inside the stone. As for the silky varieties, if the stone is fairly clear it is termed young milky and less clear varieties are named thick milky geudas. The milky geudas may on occasions exhibit a bluish tint inside the milky cloudy effect. This

variety of geuda gives the sheen or radiance or the colour effect exhibited by diesel. In fact it gives the colour of diesel.

v. Blue Geuda

The blue geuda is classified as listed in Figure 5.

Figure 5

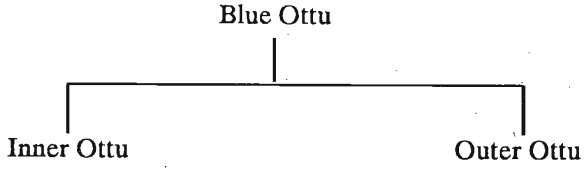


The term blue geuda is applied to mean a blue sapphire containing crystalline rutile as clouds, bands or patches inside the stone. In other words a blue sapphire showing a Kowanguwa effect (patches) is termed blue geuda. When the blue silky variety of geuda contains a dark brown colour it is termed Kahata blue silky geuda; when a silky effect is shown it is termed blue silky geuda and the term blue milky geuda is used when a milky effect is shown. Both these varieties are again divided into the young and thick varieties. When the blue geuda stone shows a very weak star effect it is termed Malukkan.

vi. Blue Ottu

Corundum stones with a blue colour stain not uniformly distributed is termed Blue Ottu. (Figure 6)

Figure 6



The Blue Ottu is classified into 2 varieties as inner ottu and outer ottu. The inner ottu stone exhibits a blue stain which is concentrated inside the stone. The outer ottu is a stone with a blue stain on the outer surface of the stone giving the appearance that it is painted (inky painted appearance).

The classification presented in this article is a field-based one. The terms described are those commonly used by local gem miners involved in the low value corundum trade. It is a classification which has evolved over a long period of time. They have now become common terms that are understood by all in this area of activity. It is hoped that the present work will form the basis for a more scientific, future classification of low value corundum occurring in Sri Lanka.

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