
MOLDAVITE

MYSTERIOUS TEARS FROM HEAVEN





RADEK HANUS ET AL.

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GRANIT

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Photographs without legends:

front cover: Extremely rare Moldavites from the deposit in Besednice, South Bohemia and various products from Moldavite

back cover: Contemporary jewels offered for sale by Mineral, Milan & Eva Purkart

page 1: Historicist jewel with Moldavite in Art Nouveau style

page 2: Exceptional droplets and dumbbells from Besednice – Stoh, weight of the second droplet is 19.6 g

page 3: Brilliant cut of Moldavite, weight: 9.3 ct

page 4: Moldavite from Štěpánovice, Moravia, weight: 10 g

page 5: Moldavite from Besednice – Stoh, weight: 92 g

page 6: Beautifully sculpted Moldavites from Besednice – Ježkovna, weight of the first one is 24.8 g

page 7: Portrait gemma from a South Bohemia Moldavite, author Zdeněk Petr

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The Moldavite from South Bohemia in the pictures are from Přemysl Dušek’s collection. He has also devised a system for appreciating Moldavite, which is published for the very first time in this book. The other stones are from collections belonging to Aleš Grabmüller, František Tůma, Martin Wichterle, Jan Mandík, Přemysl Bureš, Michal Vašíček, Karel Valter, Karel Mařík and others.

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A Moldavite in mother rock from Chlum nad Malší. Width of the picture: 40 mm

THE MYSTERIOUS WORLD OF MOLDAVITE

Moldavite, or “vltavíny” in the Czech language, has grown in reputation from initially appealing mostly to collectors who appreciated them for their beautiful color and interesting, natural shapes to recently being brought into public notice and quickly gaining popularity worldwide. The aesthetic qualities predestine them to be used as jewels. Thanks to their mysterious origins, they are favourites with propagators of esoteric teachings, who ascribe to them an extra-terrestrial origin and other attributes.

Moldavite was first described almost 250 years ago in the Vltava Basin, although local people knew them and had used them as jewels before. There were even discoveries of stones used by Neolithic people for tool making.

Moldavite became most famous as jewels at the 1891 General Land Centennial Exhibition in Prague where they were presented in the company of Bohemian garnets as typical Czech precious stones. After experiencing a short period of popularity during Art Nouveau, their popularity faded

until the 1960’s when they became a material appreciated in jewellery making again, while usually being kept in their natural form. At present, due to how well the colors of Moldavite and gold compliment one another, faceted precious stones embedded in gold are pushing their way forward.

This book is intended to present Moldavite from different perspectives. First of all, the book explains that their origin is extra-terrestrial. It defines their exceptional position among tektites from all over the world. It introduces readers to their characteristic properties and is the first to show how Moldavite can be distinguished from glass and/or Chinese fake Moldavite that has recently appeared on the market. People interested in esotericism will have the chance to read the most important piece of information – that Moldavite is one of the most appreciated occult stones. Nevertheless, the greatest contribution of this book is its pictorial section, which presents a large number of Moldavite with their natural beauty as never seen before.



Illustration of an asteroid impact (from the NASA archives)



Various shapes of indochinites from a deposit in Yen Bai, Vietnam. The biggest stone is 70 mm wide

WHAT ARE TEKTITES?

From the geological point of view, Moldavite is found only in the Czech Republic. It belongs to the tektite group of natural glasses that can be found in different regions all over the world; the Greek word *tektós* means “molten” or “fused”. It also expresses the molten, glass-like nature of natural materials. This name was introduced by the Austrian researcher F. E. Suess (1900). The oldest written mentions of tektites are from China from Liu Sun (950, Tang dynasty). People in Than Liou picked them after heavy rains in the fields.

Natural glasses are a wider group which include volcanic glasses, e.g. obsidians.

Glass is the product of melting that was cooled down to a solid base without crystallization. It is an amorphous solid substance without regular structuring at the distance greater than the multiple size of elementary construction units. The glass-like appearance is due to smooth transition from the liquid into the solid state. And, vice versa, glasses become softer when heated until they achieve the viscosity of fluids. That is the reason why glasses are considered to be super-

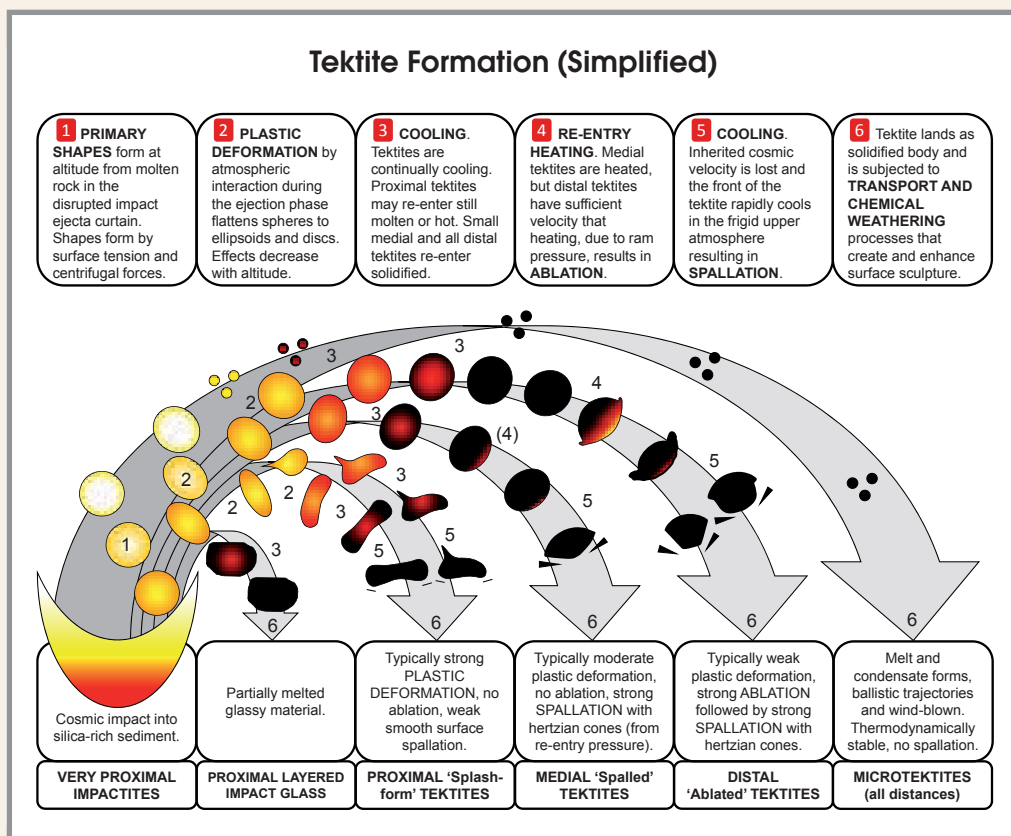


Chart from www.tektites.co.uk, reproduced with kind permission of the author, Mr. Aubrey Whymark (November 2014)

SOUTH BOHEMIAN DEPOSITS

Moldavite deposits in Southern Bohemia contain undoubtedly the most beautiful tektites in the world. They are situated approximately within the area corresponding to the České Budějovice and Třeboň Basin, which formed in the Cretaceous and Tertiary periods. They were transported from these areas by watercourses in the north; the most distant specimens were found in the Elbe sediments near Dresden. The composition of South Bohemian Moldavite differs from stones from other strewn fields. Judging by the content of lechatelierite and bubbles, there are actually two strewn fields that partly overlap: South Bohemia and Radomilice. They are divided from the South Moravian strewn field by a 60 kilometre wide strip where there have been no discoveries. Most of the South Bohemian Moldavite comes from an altitude of 400–590 metres. Mol-



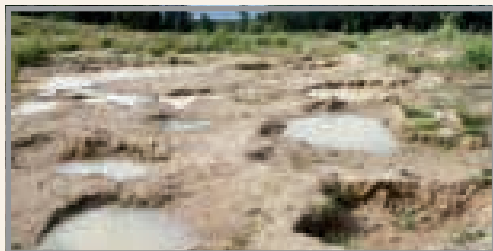
Picture of a sand quarry in Chlum nad Malší

davite has never been found here “in situ”, or at the place where they fell. This is also the case with microMoldavite, however, the explanation might be that they simply did not remain preserved in this aggressive environment. The typical color predominantly is different shades of green. According to Bouška (1987), the deposits may be divided into the following four types:

1. The Upper Miocene Sediments – Moldavite deposited in these sediments has only been slightly transported. It is deeply corroded with a distinctive texture. These deposits are usually only 0.5–2 metres wide. Moldavite findings in this area are quite frequent, although not very aesthetic. Well-known deposits are Besednice – Stoh, Vrábče – Nová Hospoda, Krasejovka, Slavče, Habří, Jankov, and Bukovec.
2. Pliocene and Pleistocene Sediments – These sandy-gravelly sediments are, at some parts, 12 metres wide. They are typically colored by iron oxides and contain a large amount of feldspars, so they are sometimes called feldspar sandy gravels. Moldavite is usually found in the form of shiny round stones and is deeply textured. Well-known deposits are Besednice, Ločenice, Chlum nad Malší, Milíkovice, Korošky and Lhenice.



Typically worn Moldavites from the fields around the Radomilice area, the biggest one: 15 g



Consequences of illegal mining in the Slavče locality

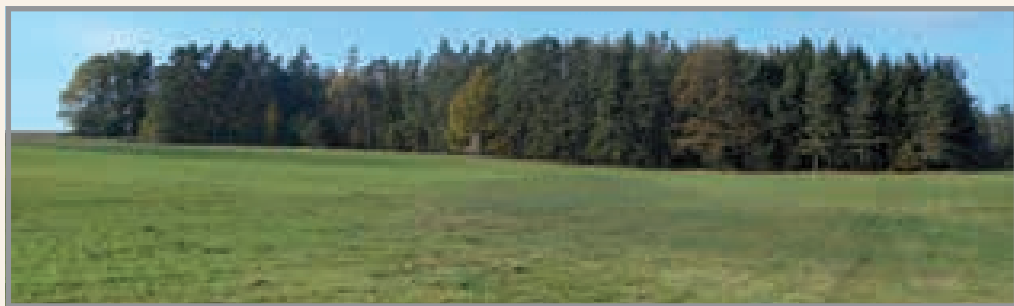
3. Quaternary Slope Soils and Brashes – these probably date back to the Pleistocene epoch. They include Moldavite that was transported only a little, and their discoveries are not plentiful or extensive.
4. Alluvial Sediments – Moldavite is deposited in river terraces formed during the Holocene or towards the end of the Pleistocene epochs. Typical deposits are Radomilice, Zbudov and České Budějovice. Finds from the territory of Prague are a certain curiosity. The Moldavite here is usually consists of round shaped stones with water-worn surface.

According to Bouška, the total weight of Moldavite glass which fell at the end of the Tertiary epoch in Southern Bohemia and Southwest Moravia would form a sphere with a diameter of 14 meters. The average weight of South Bohemian Moldavite is 4 grams, with the exceptional few exceeding 40 grams.

Principally, South Bohemian deposits may be divided into three groups. Originally, field collections did not affect the landscape. After deep ploughing was introduced, findings at certain places were plentiful. Now, almost all the stones have been picked. The number of collectors grew together with the price of Moldavite as they became a very sought-after article, especially after their use for esoteric purposes became fashionable. Illegal diggers started digging deep at places they had preselected, often in deserted sand quarries and places where land amelioration was made. Later on, they started digging in the fields or forests which were a better place for hiding.

Illegal digging usually takes place at night, when diggers can dig as deep as 3.5 meters. They can do this without any belaying, which means it is not only hard work, but also dangerous. Soft sands and sandy gravels are unstable creating life-threatening slides. At present, illegal diggers use very advanced technology, water pumps, and timbering. And, thanks to night vision devices, they can successfully avoid being revealed. These “collectors” damage forests or leave big holes in the field into which even a big tractor may fall.

Moldavite is also mined industrially in sand and/or gravel quarries. The best and biggest known is probably that in Chlum nad Malší. Mining is usually accompanied by the extraction of building materials in these quarries.



Un-ploughed fields make it impossible to search for Moldavites as the case is with this deposit near Nesměň

BESEDNICE

This deposit is situated 25 kilometres south of České Budějovice at the foothills of the Slepíčí Hills. It was described after a single finding of a Moldavite in 1943, but it was considered to be discovered by Mr. Rudolf Piša in 1965. Collectors also refer to this deposit as **Ježkovna**. Moldavite is deposited in sandy gravels here. There was legal mining here until 2008, but illegal mining took place in the surroundings of the village until 2000. Two years later, the locality was reclaimed and planted with trees. The extraction of Moldavite is prohibited – one will be fined if attempted. Nevertheless, there are still efforts to mine Moldavite illegally. Illegal diggers often dig more than 6 meters deep during the dark hours of the night, using planking for

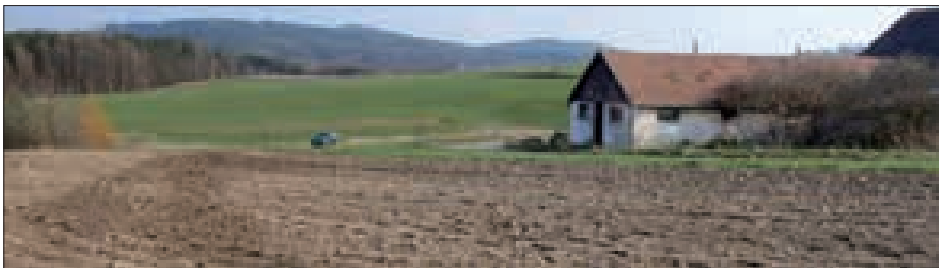
their safety. Today, there is a natural reservation in Besednice.

In Besednice, splash-forms were quite frequent in disc, droplet, and dumbbell shapes. These shapes were the most prevalent, especially those found in Ježkovna, with their rich and deep texture. The particular matte, shine, beautiful green color, and quality of texture that this particular Moldavite possessed was unprecedented in other deposits. Their “spikes” can be over 1 centimetre long. Moldavite from this location is the most valued type and they are often inserted – in their natural form – into jewels. Their shapes make them very suitable for jewellery. Nowadays, similar stones from different locations are passed off as these.

About 1 kilometre to the northwest of the village, there is a deposit referred to by collectors as **Stoh**, where Moldavite was deposited in Tertiary clays. Thanks to their rugged surface, the stones seem quite big, although their average weight is about 10 grams. The deposit, once mined illegally, is exhausted today. About 2 kilometres to the north of Besednice, there is a deposit called **Nesměň**.



Reclaimed Ježkovna in Besednice



A field in the Nesměň locality

BESEDNICE



Typically sculpted Moldavites from Besednice, the biggest one weighs 40 grams