

**Rhodohrosite** on quartz matrix, crystal size 5.5 x 4.5 x 3.0 cm. Sweet Home Mine, Co, USA. Specimen: Bryan Lees



## MINERAL FINDINGS AROUND THE WORLD ALONG THE 40° N PARALLEL

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Photo: Michael B. Leybov

**T**his article reviews the mineral findings from different countries within the belt about 100 km wide between 40° and 41° N (with some additions). Along the 40° N latitude, thousands of mineral localities from famous Vesuvius to ordinary occurrences of agates are known. Several tens of them are included in this review being the most famous localities with the examples of findings for 200 years. First of all, these are large crystals, new minerals, rare species and kinds, as well as minerals, which are stood out in number of hand specimens in collection. For instance, giant crystals (individual crystals) of pyrite from Greece and Colorado (0.6 and 0.3 m in size, respectively), borates (probertite 1 m), calcite (2 m), and halite (1.5 m) from Turkey, spodumene (10 m) and tourmaline (2 m) from Tajikistan and others. Two (Franklin and Vesuvius) from five major sources of new minerals in the World locate within this belt, as well as the major sources in the southern part of Asia including Dara-i-Pioz, Bayun-Obo, and Khaidarkan. Aragonite, celestine, vesuvianite, and nepheline were firstly described from these localities. The highest quality collector specimens were produced from Panasqueira (apatite, ferberite), Kop Krom (kämmererite), Kochbulak and Magnolia (native tellurium), Shor-Su (sulfur), Kadamdzhai (stibnite), Khaidarkan (aragonite and others), Red Ledge Mine (gold crystals), and Sweet Home Mine (rhodochrosite). Findings of agate (including from sedimentary rocks!), turquoise, nephrite, vesuvianite, red beryl, topaz, and variscite are stood out among gems and color stones. Uncommon genetic types of mineralization (Cheleken, Turkmenistan; Green River Formation, USA) were identified and the largest economic deposits (Almaden, Bayun-Obo, Carlin, Spor Mountain) in the World were found in this belt.

Specific mineralogical profile of thousands km long is interesting both for mineralogists and geologists. It allows comparison of mineralogy of large regions and contains the examples of the ordered location of the large crystal localities (Evseev, 1989).

See [http://geo.web.ru/druza/a-Ev\\_40n.htm](http://geo.web.ru/druza/a-Ev_40n.htm) for the complete version of the article in Russian.

See Evseev, A.A. (2004): Atlas of the World for mineralogist. Ecost Association, Moscow (in Russian) and <http://geo.web.ru/druza/> (in Russian) for more detailed information on findings in different countries and regions

### Abbreviations and legend

dep. – deposit

Q. – quarry

M. – mine

tw – twins

xl(s) – crystal(s)

Pref. – prefecture

f – photo

nm – new minerals

\* – **new mineral** (italic) and type locality

@ – a first find in the former USSR territory

mdt – [www.mindat.org](http://www.mindat.org)

MR – *Mineralogical Record*

FMM – A.E. Fersman Mineralogical Museum (Moscow)

!!! – exceptional specimens and finds (**bold**)

!! – remarkable specimens, important finds

! – specimens and finds are interesting in any sense

**Note:** Localities coordinates are approximate. They are received, basically, with using Encarta Interactive World Atlas 2001, and by additions from database [www.mindat.org](http://www.mindat.org) and other publications. Names and locations of some mineral localities require refinement.