

OUTSTANDING MINERAL OCCURRENCES IN ROMANIA: WHAT'S NEW?

UDUBAŞA, G.

Geological Institute of Romania, Caransebeş Street No. 1, RO-78344 Bucharest-32, Romania.

E-mail: udubasa@igr.ro

To date some 900 mineral species are known in Romania, much more than UDUBAŞA (1999) reported, i.e. about one quarter of the minerals in the world. The increase of number of mineral species is considerable as compared to about 450 in 1966. An attempt was also made to identify the most "productive" occurrences ("sacred monsters") (see table) both as concerns the total number of mineral species and some unusual crystal forms or intergrowths (UDUBAŞA, 1994).

Among the "sacred monsters" the hydrothermal and skarn deposits are by far dominating. In addition to the old skarn deposits quoted in the table, the high temperature skarn occurrences at Măgureaua Vaţei near Brad (Cornet Hill and Cerboia Valley localities) have proved to contain also numerous other high-T calcium silicates as well as the rare chlorosulphide, djerfisherite, and hydroxyllestadite (PASCAL *et al.*, 2001; MARINCEA *et al.*, 2001). Nevertheless the caves and the stratiform Mn-Fe ores show a greater mineral diversity after recent careful investigations by ONAC & DAMM (2002), ONAC *et al.* (2000), MARINCEA *et al.* (2002) and HARTOPANU (2002), respectively. Metatyuyamunite, wittichenite, scawtite, tinsleyite, taranakite, norsethite etc were thus identified in different caves. The whole series of the manganhumites, some silicates-arsenates, nambulite, bannisterite etc are only few among the 300 mineral species and varieties discovered in the Mn-Fe ores in the Bistriţa Mts. (HARTOPANU, 2002 and this volume). It is expected that the Ditrău "monster" will produce soon many novelties as about one quarter of the proposals for new minerals submitted to CNMMN is delivered by alkaline massifs.

Table

"Sacred monsters" of mineral occurrences in Romania
(1 to 8 acc. to UDUBAŞA, 1994).

1. Săcărâmb / Nagyág: 120 mineral species, 6 times type locality.
2. Baia Sprie / Felsőbánya: 80 m.s.; 6xTL; Felsőbánya habit of "adularia".
3. Băiţa Bihor / Rézbánya: 120 m.s.; 5xTL.

4. Ocna de Fier / Moravicza / Vaskő / Eisenstein: 100 m.s.; 2xTL. Also many pyrite crystal forms have their TL here.
5. Ditrău / Ditró: 60m.s.; a new Bi-Pb sulphotelluride.
6. Răzoare/Macskemező: 70m.s.; many rarities!
7. Roşia Montană / Verespatak: 50 m.s.; twin law of high quartz.
8. Uroi/Arany/Aranyerberg: 20 m.s.; TL of pseudo-brookite.
9. Bistriţa Mts (Iacobeni, Dadu, Tolovanu, Oiţa deposits, etc): some 300 mineral species and varieties discovered in the last 10 years (HARTOPANU, 2002 and the paper in this volume).
10. Bihor Mts caves: mineral rarities: taranakite, metatyuyamunite, norsethite, glaucosphaerite, scawtite, etc. (ONAC & DAMM, 2000; ONAC *et al.*, in press).
11. Cioclovina Cave: TL of ardealite; also brushite, crandalite, tinsleyite, etc. (MARINCEA *et al.*, 2002)
12. Măgureaua Vaţei: high T skarns with scawtite, tilleyite, spurrite, gehlenite and many other Ca silicates, as well as hydroxyllestadite, djerfisherite etc. (PASCAL *et al.*, 2001; MARINCEA *et al.*, 2001).

References

- HARTOPANU, P. (2002). Ph.D. Thesis, Univ. of Bucharest
- MARINCEA, Şt., BILAL, E., VERKAEREN, J., PASCAL, M. L. & FONTEILLES, M. (2001). Canadian Mineralogist, 39: 1435-1453.
- MARINCEA, Şt., DUMITRAS, D. & GIBERT, R. (2002). Eur. J. Mineral., 14: 157-164.
- ONAC, B. P. & DAMM, P. (2002). Studia Univ. Babeş-Bolyai, Geologia, XLVII: 93-104.
- ONAC, B. P., KEARNS, J., DAMM, P., WHITE, W. B. & MATYASI, S. (2000). Rom. J. Mineralogy, 80: 5-10.
- PASCAL, M. L., FONTEILLES, M., VERKAEREN, J., PIRET, R. & MARINCEA, Şt. (2001) Canadian Mineralogist, 39: 1405-1434.
- UDUBAŞA, G. (1994). Anal. Univ. Bucuresti, XLIII, Suppl.: 34-35.
- UDUBAŞA, G. (1999). Rom. J. Mineralogy, 79: 3-30.