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PŮVODNÍ PRÁCE/ORIGINAL PAPER

Mn-bearing sulfosalts from Roveňské pásmo Lode of Kutná Hora ore district, Czech Republic: benavidesite, Mn-rich jamesonite, Mn-rich Ag-excess fizélyite and Mn-rich senandorite

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Abstract

A rare and interesting occurrence of Mn-bearing sulfosalts has been found in samples from medieval mine dumps of Roveňské pásmo Lode of Kutná Hora ore district, Czech Republic. The following suite of manganese-containing sulfosalts was identified: Mn-rich Ag-excess fizélyite, Mn-rich senandorite, benavidesite and Mn-rich jamesonite. Chemical analyses are presented and discussed. The empirical chemical formula of Mn-rich Ag-excess fizélyite is $\text{Ag}_{6.10}\text{Cu}_{0.06}(\text{Pb}_{12.69}\text{Mn}_{0.70}\text{Fe}_{0.26})_{\Sigma 13.65}\text{Sb}_{20.98}\text{S}_{48}$, that of Mn-bearing senandorite is $(\text{Ag}_{0.94}\text{Cu}_{0.05})_{\Sigma 0.99}(\text{Pb}_{0.99}\text{Mn}_{0.03})_{\Sigma 1.02}\text{Sb}_{3.00}\text{S}_{5.98}$. The mean chemical composition of benavidesite is $\text{Pb}_{3.92}(\text{Mn}_{0.50}\text{Fe}_{0.45})_{\Sigma 0.95}\text{Sb}_{6.18}\text{S}_{13.95}$ and that of Mn-rich jamesonite is $\text{Pb}_{3.92}(\text{Fe}_{0.57}\text{Mn}_{0.37})_{\Sigma 0.94}\text{Sb}_{6.13}\text{S}_{14.02}$. An overview of Mn-containing sulfosalts is given.

Key words: Mn-bearing sulfosalts, benavidesite, Mn-rich jamesonite, Mn-rich Ag-excess fizélyite, Mn-rich senandorite, chemical composition, Kutná Hora ore district, Czech Republic

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