

Crystal Data: Monoclinic. *Point Group:* 2/*m*. Platy fragments, in granular to parallel fibrous aggregates, to several mm.

Physical Properties: *Fracture:* Uneven. Hardness = n.d. VHN = n.d. D(meas.) = n.d. D(calc.) = 6.91

Optical Properties: Opaque. *Color:* Steel-gray on fresh fractures, turning brown to black; in polished section, creamy white. *Anisotropism:* Moderate.

R₁–R₂: n.d.

Cell Data: *Space Group:* P2₁/*m*. *a* = 28.44 *b* = 3.95 *c* = 17.55 *β* = 106.1° *Z* = 2

X-ray Powder Pattern: Calculated from structure.

3.06 (100), 3.63 (74), 3.21 (61), 2.85 (43), 2.66 (38), 3.18 (34), 2.19 (30)

Chemistry:

	(1)	(2)	(3)
Ag	3.26	1.00	2.76
Pb	6.71	6.47	10.60
Cu	9.45	11.74	9.76
Cd		0.01	
Bi	61.40	61.24	58.83
S	18.90	18.35	18.05
Total	99.72	98.81	100.00

(1) Băița, Romania; by electron microprobe, average of six analyses on two grains; corresponds to Ag_{1.13}Pb_{1.21}Cu_{5.55}Bi_{10.97}S_{22.00}. (2) Ocna de Fier, Romania; by electron microprobe, average of 37 analyses; corresponds to Ag_{0.36}Pb_{1.20}Cu_{7.11}Bi_{11.28}S_{22.05}. (3) AgPb₂Cu₆Bi₁₁S₂₂.

Occurrence: Intimately intergrown with other Pb–Bi sulfosalts.

Association: Hammarite, pekoite, bismuthinite, cuprobismutite, hodrushite, chalcopryrite, grossular, andradite.

Distribution: In Romania, from Băița (Rézbánya) [TL], and in the Paulus mine, Ocna de Fier (Morávicza; Vaskő). At Banská Štiavnica (Schemnitz), Slovakia.

Name: Honors Dr. Karel Paděra (1923–), Czech mineralogist, Charles University, Prague, Czech Republic, who first worked on the mineral.

Type Material: Charles University, Prague, Czech Republic, 11329; National Museum of Natural History, Washington, D.C., USA, 164244.

References: (1) Mumme, W.G. and L. Žák (1985) Paděraite, Cu_{5.9}Ag_{1.3}Pb_{1.6}Bi_{11.2}S₂₂, a new mineral of the cuprobismutite–hodrushite group. *Neues Jahrb. Mineral., Monatsh.*, 557–567. (2) Mumme, W.G. (1986) The crystal structure of paderaite, a mineral of the cuprobismutite series. *Can. Mineral.*, 24, 513–521. (3) Cook, N.J. and C.L. Ciobanu (2003) Lamellar minerals of the cuprobismutite series and related paděraite: a new occurrence and implications. *Can. Mineral.*, 41, 441–456.