

Crystal Data: Monoclinic, pseudo-orthorhombic (?). *Point Group:* n.d. As nodules, to 1 mm, composed of rounded tabular plates, flattened on [010], which may aggregate to form botryoidal crusts.

Physical Properties: *Cleavage:* Two, irregular, || [001] and [100]. *Hardness* = ~3
D(meas.) = 3.4 D(calc.) = 3.39 Radioactive.

Optical Properties: Semitransparent. *Color:* Golden yellow.
Optical Class: Biaxial (-). *Pleochroism:* Strong; pale greenish yellow to pale yellow.
Orientation: Oblique extinction. $\alpha = 1.643(2)$ $\beta = 1.664(2)$ $\gamma = 1.670(2)$ $2V(\text{meas.}) = \text{n.d.}$
 $2V(\text{calc.}) = 56^\circ$

Cell Data: *Space Group:* n.d. $a = 11.10$ $b = 17.7$ $c = 18.0$ $\beta = \sim 90^\circ$ $Z = 14$

X-ray Powder Pattern: Kobokobo pegmatite, Congo.
9.00 (100b), 3.133 (80), 4.70 (50), 2.978 (40b), 1.850(40), 4.45 (30), 3.53 (20)

Chemistry:	(1)	(2)
UO ₃	54.5	55.42
P ₂ O ₅	13.2	13.75
Al ₂ O ₃	9.9	9.88
H ₂ O	20.3	20.95
Total	97.9	100.00

(1) Kobokobo pegmatite, Congo; by electron microprobe, H₂O by TGA; corresponds to HAl_{1.02}(UO₂)_{1.00}(PO₄)_{0.98}(OH)₃•4H₂O. (2) HAl(UO₂)PO₄(OH)₃•4H₂O.

Occurrence: A rare secondary mineral in the oxidized uraniferous zone of a complex granite pegmatite.

Association: Meta-autunite, phosphuranylite, phuralumite, upalite, moreauite, threadgoldite.

Distribution: From the Kobokobo pegmatite, Lusungu River district, Kivu Province, Congo (Zaire).

Name: For resemblance of the mineral's color to that of the buttercup, *ranunculus* in Latin.

Type Material: Royal Museum of Central Africa, Tervuren, Belgium, RMG6201; National Museum of Natural History, Washington, D.C., USA, 145686.

References: (1) Deliens, M. and P. Piret (1979) Ranunculite, AlH(UO₂)(PO₄)(OH)₃•4H₂O, a new mineral. *Mineral. Mag.*, 43, 321–323. (2) (1980) *Amer. Mineral.*, 65, 407 (abs. ref. 1).