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LETTER Discreditation of paraspurrite

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ABSTRACT

Paraspurite is discredited as a mineral species. No type material was available necessitating collecting new material from the original locality. A crystallographic study shows paraspurite to be polysynthetically twinned spurite, twin law by reflection on {001}. The spurite cell calculated from XRPD unit-cell refinement is a = 10.478(3), b = 6.700(2), c = 14.127(3) Å, $\beta = 101.02(2)^\circ$, V = 972.8(3) Å³. The cell refined on two "twinned" crystals yielded: a = 10.494(1), b = 6.7116(6), c = 28.216(3) Å, $\alpha = 90.059(6)$, $\beta = 100.132(5)$, $\gamma = 90.023(6)^\circ$. This monoclinic primitive cell transforms to monoclinic *B* (Fig. 2): a = 10.494, b = 6.7116, c = 55.56 Å, $\alpha = 90$, $\beta = 90.6$, $\gamma = 90^\circ$, which corresponds to a sub-cell described as "paraspurite" by Colville and Colville (1977); space group $P_{1/a}$ with cell parameters: a = 10.473, b = 6.706, c = 27.78 Å, $\alpha = 90$, $\beta = 90.58$, $\gamma = 90^\circ$. The discreditation has been approved by the IMA Commission on New Minerals, Nomenclature and Classification.

Keywords: Paraspurrite, discreditation, twin, crystallography