

VIII.—Note on “Romeite” from Borneo.

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UNDER the name of Romeite a mineral from Borneo has found its way into many collections. There is, however, little in common between the true romeite of St. Marcel in Piedmont and the so-called romeite of Borneo. Both are hyacinth or honey-yellow with darker portions verging towards clove-brown; both contain antimony; here all resemblance ends. The easy solubility in acids, and the low specific gravity (under 2.0) of the Borneo mineral at once separate it from romeite; it is, in fact, nothing but a variety of allophane containing a little antimonious oxide. The following analysis may not be without interest; the mineral was selected and purified by mechanical means as far as possible, but still contained a small quantity of gangue, chiefly insoluble silica.

Analysis I.—3285 gram lost *in vacuo* .0567 gram H₂O; nothing further in the water-oven; but .0078 gram at 100° in the air-bath. On ignition, a further loss of .068 gram occurred.

Analysis II.—4218 gram, after having been washed and slightly dried in the water-oven, gave—

Insoluble Silica	.. .. .	.0228	gram
Soluble Silica	.. .. .	.071	”
Antimonious Oxide	.. .. .	.006	”
Alumina	.. .. .	.165	”
Calcium carbonate	.. .. .	.005	”
Magnesium pyrophosphate	.. .. .	.005	”
Ferric oxide	.. .. .	trace	”

Analysis III.—255 gram of the same sample as that used in Anal. II gave on ignition,

Water095 gram.

When the results obtained in these analyses are corrected for insoluble silica, and in II and III, for partial desiccation, they yield the following percentages :

Water lost <i>in vacuo</i> over H_2SO_4	..	18.53	per cent.
„ „ in the water oven	..	none	
„ „ in air-bath at 100°	..	2.51	
„ „ on ignition	.. ..	21.84	
Alumina	.. .. .	39.02	
Lime	.. .. .	.66	
Magnesia	.. .. .	.33	
Antimonious oxide (Sb_2O_3)	.. ..	1.42	
Silica (soluble)	.. .. .	16.79	
		<u>101.10</u>	

Were it not for the low percentage of silica these numbers might represent one of the minerals included under allophane, an attribution which the physical properties of the present mineral confirm. Moreover, some specimens, at all events, of allophane lose, exactly as our Borneo mineral loses, half their water at 100° C. If we assume that the silica deducted as insoluble, and therefore as an accidental impurity, was really essential, then the numbers would approach more closely to those required for an allophane.