found in small amounts in both granite and small pegmatite dikes in the granite at scattered localities. The area seems to have escaped investigation in recent comprehensive surveys of beryllium (Warner *et al.*, 1959) and might warrant detailed examination to assess its beryllium potential.

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JEŽEKITE IS MORINITE

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It is stated by Frondel (1947) that *x*-ray and optical study of morinite (presumably from Montebras, France) showed it to be identical with ježekite. This was confirmed by Fisher and Runner (1958), who however considered that the name ježekite should be dropped, since morinite has priority.

I have recently completed a detailed optical study of the two minerals, together with the Black Hills morinite, on the temperature-controlled spindle stage (Fisher, 1962); the results are given in Table 1. Precession *x*-ray pictures were also taken of the French morinite and of ježekite from the type locality, samples of both of which were supplied me by F. Čech of the Mineralogical Institute of Charles University (Prague)

TABLE 1. OPTICAL MEASUREMENTS (ROOM TEMPERATURE, Na LIGHT)

Mineral	α	β	γ	2V (calc.)	$\gamma-\alpha$	$\gamma-\beta$	$\beta-\alpha$
Morinite (Black Hills)	1.5530	1.5653	1.5670	40°07′	.01400	(.00166)	.01234
Morinite (Montebras)	1.551	1.562	1.565		.0143		
Ježekite	1.5532	1.5590	1.5616	67°12′	.00842	.00260	(.00582)

Note. These results were checked against birefringence values (see the three columns on the right) measured on the Umirg (Fisher, 1960) in the case of ježekite and the Black Hills morinite. There was only one such check for the Montebras morinite, and since the crystal studied was somewhat mosaic, the results obtained for it are less reliable. The slope of the birefringence curve is given by the fact that $\alpha=1.5573$ for λ of 510 (Black Hills morinite).

through the kindness of Dr. Jan Kutina. The findings appear in Table 2. Intensities of many reflections were checked, giving added proof of the fact that these represent one mineral.

It is clear that the values given in these tables for the two morinites are closer to one another than they are to those of ježekite, thus confirming that ježekite is a sodian morinite, which accounts for its slightly smaller indices of refraction. However the most surprising result of this study is that the ježekite crystals supplied me had a brand-new habit, entirely different from anything seen by Slavik. This is illustrated by Fig. 1, which shows how the crystals are elongated parallel [*b*], and also indicates the relative development of the various forms. Averaging two

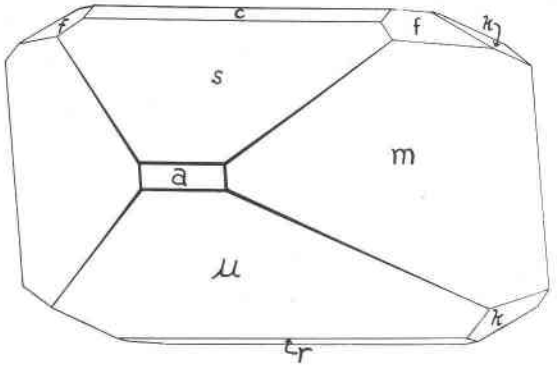

FIG. 1. Ježekite from Greifenstein, Saxony.

TABLE 2. NEGATIVE CRYSTALS WITH $\gamma \rightsquigarrow [b]$

Mineral	a	b	c	β	V_0	$\beta/\backslash c^1$	Axial ratio
Morinite (Black Hills)	9.456	10.690	5.445	105°27½′	530	−60½°	0.8846:1:0.5094
Morinite (Montebras)	9.410	10.709	5.412	*do*	525	−71½ ±2	0.879:1:0.505
Ježekite	9.617	10.696	5.480	108°10′	535	−68 ±2	0.899:1:0.512

[1] Negative sign means that the β direction lies in obtuse angle β.

crystals which are about 0.3 mm. thick, the large faces are s (101), μ ($\bar{2}01$) and m (110); the medium-sized faces are f (011), k ($\bar{1}11$) and a (100); the small faces are r ($\bar{1}01$) and c (001); very small faces (not shown on Fig. 1) include o (111), v (1$\bar{2}$1), w ($\bar{4}$21) and t (102). From the morphology of these crystals there is no evidence as to whether a plane of symmetry is or is not present, although Fig. 1 is drawn as if there were a plane. The new forms are k and the first three listed that are represented by very small faces. Note that s (101), not found on the Black Hills morinite, occurred as a very small face on the crystals studied by Slavik (see his figure in Dana's System II, p. 784). It is surprising that angle β is over 2½° larger on the ježekite sent me than on the crystals studied by Slavik; the figure given (Table 2) is considered to be accurate within ¼°.

It is true, as Slavik points out, that the old analysis of ježekite (by Skarnitzl; see Fisher and Runner, 1958, pp. 591 and 594) is such as to make it doubtful that it and morinite are the same mineral. However, until a modern analysis of ježekite is made, in view of the techniques used in the present study not developed in Slavik's time, it can only be concluded that the only available analysis is quite unsatisfactory.

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