## EWA TOMCZYKOWA

# A NEW SPECIFIC NAME FOR TRIMERUS LOBATUS TOMCZYKOWA, 1975 AND TAXONOMIC VALUE OF HOMALONOTUS LOBATUS PROUTY, 1923

Abstract.—T. permutus nom. n. is proposed for preoccupied specific name, Trimerus lobatus Tomczykowa, 1975, Silurian trilobite of Poland. The name Homalonotus lobatus introduced by Prouty (1923) for trilobite from Silurian of Maryland, appeared to be a junior synonym of Trimerus delphinocephalus Green, 1832, as the name for juvenile stages.

Dr. E. Schrank of the Museum für Naturkunde in Berlin drew my attention to the fact that the specific name *Trimerus lobatus* Tomczykowa, 1975, is preoccupied by *Homalonotus lobatus* Prouty, 1923. The latter name was introduced for trilobites occurring together with the representatives of *Trimerus delphinocephalus* Green, 1832, in the Silurian of Maryland, USA (Swartz and Prouty 1923). The specific name *T. lobatus* Tomczykowa, 1975, introduced for trilobite from the *Formosograptus formosus* Zone, Upper Siedlce Series, Silurian, Poland (Tomczykowa 1975: 24, pl. 2:1—8, figs 5 and 7c), is here replaced with *Trimerus permutus* nom. n. The latter name is derived from Latin *permuto* — to alterate. The holotype and diagnosis remain unchanged (Tomczykowa, *l.c.*).

The name *H. lobatus* Prouty was given for samples described together with *Trimerus delphinocephalus* Green from the Silurian, Rochester Formation of Maryland (Schwartz and Prouty, *l.c.*). Thanks to the courtesy of Dr. G. A. Cooper, Palaeobiologist Emeritus, and Mr F. J. Collier, Collection Manager of the National Museum of Natural History, Smithsonian Institution, I got photographic negatives and latex casts of specimens described and figured by Prouty (1923: 712—714, pl. 35:5—16). The comparison of the latex casts showed that *Homalonotus lobatus* Prouty, 1923, is conspecific with *Trimerus delphinocephalus* Green, 1832, represented by the juvenile forms; therefore, its should be considered the junior synonym of the former species.

According to Prouty (1923: pl. 35:11—16), lateral glabellar lobes of H. lobatus are developed "to a greater degree than is usual in this genus". However, more or less developed lobation is displayed by representatives of almost all Silurian species of Trimerus, which is especially well visible in their moulds (see Tomczykowa 1975). Among the specimens described by Prouty as H. lobatus there are four glabellae preserved as moulds and this is probably the reason of their glabellar furrows being so well marked (pl. 15:3-6). The specimens of Trimerus delphinocephalus Green from Maryland represent also mainly young individuals. The specimen with exfoliated cranidium and very faint glabellar furrows (pl. 16:2) presumably represents one of "two specimens from the shale (which) have practically smooth glabella" (Prouty 1923: 713). Carapace of somewhat larger crandium of T. delphinocephalus is somewhat damaged on glabella, which emphasizes outline of glabellar furrow in side view (pl. 16:1a). It follows that the occurrence of glabellar lobation clearly depends on preservation of a given specimen.

The measurements taken on the latex casts showed that glabella of the largest cranidium of *H. lobatus* Prouty (1923, pl. 35:14), refigured here (pl. 15:6) is almost of the same size as that of the holotype of *Trimerus delphinocephalus* Green (Tomczykowa 1975: pl. 1:7). Both these specimens display faintly marked lateral glabellar furrows similar in shape. The measurements of length and width of glabella at its base were also taken of all the representatives of *Trimerus delphinocephalus* illustrated by Green (1832: fig. 1), Hall (1852: pl. 68:1—5), Salter (1865: pl. 11:1, 3, 4) as well as of the reperesentatives of *H. lobatus* and *H. delphinocephalus* described and figured by Prouty (1923: pl. 35:5, 7, 8, 11—14). These measurements showed that glabella of *Trimerus delphinocephalus* is always wider at the base than its length (occipital ring excluded), whereas that of *T. permutus* nom. n. (= *T. lobatus* Tomczykowa, 1975, pl. 2:1, 3—5) from the Upper Silurian of Poland is longer or, sometimes, equally long and wide.

All the remaining features: sharp-pointed front of rostral plate (pl. 15:4a-b), fairly distinct central glabellar ridge (pl. 15:4, 5), and location and shape of eyes (pl. 15:4a-b), indicate that the specimens from Maryland refigured here (pl. 15:3—6) belong to *Trimerus delphinocephalus* Green. Pygidia are indistinguishable, as it was already noted by Prouty (1923: 714) who, nevertheless, allocated two of these specimens to *H. lobatus* and two to *H. delphinocephalus*.

Trimerus delphinocephalus Green is very common in several sections of the Wenlock in America, being also known from contemporaneous rocks of Great Britain. In Maryland, this species was described under the two above mentioned specific names from the same sections of the Rochester Formation from Flinstone Creek, Six-Mile House (section A and B) and Rose Hill.

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### EWA TOMCZYKOWA

NOWA NAZWA GATUNKOWA DLA TRIMERUS LOBATUS TOMCZYKOWA, 1975 I WALOR TAKSONOMICZNY HOMALONOTUS LOBATUS PROUTY, 1973

## Streszczenie

Uprzednio zajęta nazwa gatunkowa dla trylobita z syluru Polski, *Trimerus lobatus* Tomczykowa, 1975, zostaje zmieniona na *T. permutus nom. n.* Nazwa Homalonotus lobatus Prouty, 1923 dla trylobita z syluru Marylandu została uznana za młodszy synonim *Trimerus delphinocephalus* Green, 1832, jako nazwa wprowadzona dla młodocianego stadium tego trylobita.

### эва томчикова

## НОВОЕ ВИДОВОЕ НАЗВАНИЕ ДЛЯ TRIMERUS LOBATUS TOMCZYKOWA, 1975 И ТАКСОНОМИЧЕСКАЯ ПРИГОДНОСТЬ НОМАLONOTUS LOBATUS PROUTY, 1923

### Резюме

Предложенное ранее видовое название для трилобита из силура Польши, Trimerus lobatus Tomczykowa, 1975 изменяется на T. permutus nom. n. Название Homalonotus lobatus Prouty, 1923 для трилобита из силура Мэриланда следует принять из первых синоним Trimerus delphinocephalus Green, 1832, как название, введённое для юной стадии этого трилобита.

## EXPLANATION OF THE PLATES

#### Plate 15

Trimerus delphinocephalus Green, 1832 described as Homalonotus lobatus Prouty, 1923

- 1. Exfoliated pygidium, a side view. USNM 178398. Rochester Formation, Rose Hill, Md. Prouty, 1923, pl. 35:16,  $\times$  2.
- Young pygidium with exoskeleton and caudal prominence, b side view. USNM 178397. Rochester Formation, Six-Mile House, Md., Section B. Prouty 1923, pl. 35:15, × 4.
- 3. Exfoliated glabella. USNM 178395. Rochester Formation, Six-Mile House, Md., Section B. Prouty 1923, pl. 35:13, X 4.
- Exfoliated young cephalon with deep glabellar furrows (probably holotype); b side view. USNM 178393. Rochester Formation, Flintstone Creek, Md. Prouty 1923, pl. 35:11, × 6.
- 5. Young holaspid exfoliated glabella. USNM 178394. Rochester Formation, Six-Mile House, Md., Section A. Prouty 1923, pl. 35:12,  $\times$  6.
- 6. Exfoliated glabella with faint glabellar furrows. USNM 178396. Rochester Formation, Six-Mile House, Md., Section B. Prouty 1923, pl. 35:14,  $\times$  3.

### Plate 16

## Trimerus delphinocephalus Green, 1832

described as Homalonotus delphinocephalus (Green) by Prouty, 1923

- 1. Cephalon with exoskeleton: a side view showing faint glabellar furrows. USNM 164091. Rochester Formation, Flintstone Creek, Md. Prouty 1923, pl. 35:7, × 3.
- 2. Young cranidium, mould with very faint glabellar furrows. USNM 178408. Rochester Formation, Cumberland, Md. Prouty 1923, pl. 35:5, × 4.
- 3. Pygidium with exoskeleton: b side view USNM 164094. Rochester Formation, Rose Hill, Md. Prouty 1923, pl. 35:10,  $\times$  2.
- 4. Exfoliated pygidium: b side view. USNM 164093. Same position and locality. Prouty 1923, pl. 35:9,  $\times$  2.















