

ON AN ABERRANT FORM OF TRUNCATELLINA FOUND IN THE NETHERLANDS

by

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With 1 textfigure

From Mr. Ph. van Hooven I received a *Truncatellina*, found by himself on October 22nd, 1934, near Katwijk aan Zee (South Holland), at the foot of the downs. Judging by the soft parts, still present in the shell, this little snail must either have been collected in the living state or shortly after its death, as it was in fresh and uninjured condition. Probably the specimen was living in the downs and washed down by the showers or blown by the winds to the shore.

It was already known that *Truncatellina* was an inhabitant of our downs, as a worn specimen of *Tr. cylindrica* (Fér.) in the "Genist des Hochofen-Stichkanales bei IJmuiden" (North Holland) was found by Mr. H. Steusloff in 1926, though till now this little snail has never been found again.

The specimen collected at Katwijk (fig. 1) is of a cylindrical outline, with an obtuse apex and is slightly tapering towards the base. Whorls 6, including the $1\frac{1}{2}$ of the nepionic shell, which are smooth and sharply defined from the succeeding ones. The latter are convex and regularly rib-striate, the riblets numbering 3 to 0.1 mm on the last whorl. The aperture is ovate and the lip thin and not entirely finished. The colour is corneous. Length: 1.62 mm, diameter 0.76 mm.

After this description one would think that mention is made here of a *Tr. cylindrica*, but on considering the aperture under strong magnification

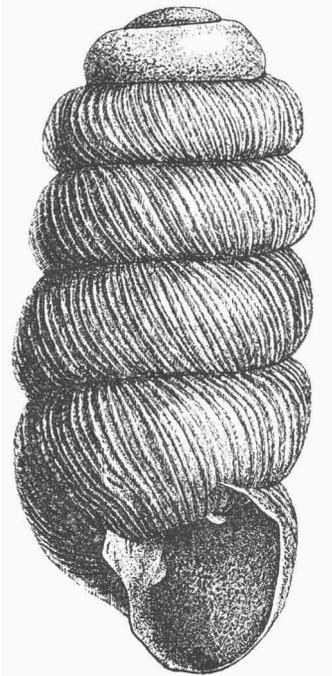


Fig. 1. *Truncatellina strobili*
(Gredl.) var. *hooveni*
var. nov. $\times 54$.

we remark that instead of being smooth, as in *cylindrica*, it is provided with teeth. The columella has a lamella beginning approximately on its midst and much in front and running onward in an oblique direction. On the midst of the parietal wall a relatively good developed tooth is visible. The palatal fold is concealed behind the columella and therefore not visible when viewed obliquely in the mouth; only when illuminated from below it shows through externally on the dorsal side as a light tubercle in the form of a horizontal note of exclamation. All these teeth make the impression of being very normally developed and not of deformations resulting from injuries of the border or surface of the mantle.

The mouth being armate the possibility of identification as *Tr. britannica* (Pils.) was to be considered. The latter species has a certain resemblance with *Tr. cylindrica*, but differs principally by its dentate aperture. A comparison with a series of specimens from this species, as well as a test with the tabular statement of Kennard & Woodward (1923, p. 294), in which they point out clearly the differential characters between *Tr. cylindrica* and *britannica*, convinced me that my specimen was no *Tr. britannica*. Only in length (1.62 mm) it seems to correspond with the last, which generally measures 1.6–1.85 mm, whilst Kennard & Woodward give for *Tr. cylindrica* a length of 1.8–2 mm. On the other hand Pilsbry (1921, p. 67) cites a specimen of *Tr. cylindrica* of smaller dimension (1.57 mm). By the number of whorls (6) and the number of ribs in 0.1 mm (amply 3), as well as by the form of the aperture, it approaches *Tr. cylindrica*, whilst the last three whorls are more convex than in *Tr. britannica* and the situation of the palatal and parietal tooth different.

Of the four West European *Truncatellina* remained only now *Tr. costulata* (Nilss.) and *Tr. sundleri* Odhner. The former occurs in South Sweden, Danmark and here and there in Germany, but this mollusc is more strongly ribbed, with more convex whorls and a quite different form of aperture and has, moreover, a whitish crest behind the lip. *Tr. sundleri*, from South Sweden, of which only few specimens are known, differs from the *Truncatellina* from Katwijk not only by its larger size (2.25 mm) and rounded-triangular aperture, but also by the absence of the palatal fold and in being striate, not rib-striate.

Repeatedly, it is true, in literature varieties of *Tr. cylindrica* were described possessing an aperture with one or more teeth, but for many of these it was proved afterwards that the authors had confounded two species. So *Tr. britannica* was considered formerly as a dentate *Tr. cylindrica*, as Ellis (1926, p. 153) tells us. Pilsbry (1921, p. 77) separated the form with an armate aperture, also on account of other characters of

the shell, as a subspecies of *Tr. rivierana* (Bens.). These characters of *Tr. britannica* and *cylindrica* were afterwards completed by the paper of Kennard & Woodward (1923, p. 294) and by the study of the anatomy of the soft parts by Steenberg (1925, pp. 96 & 138) and Watson (1923, p. 274).

In 1875 Westerlund (1875, pp. 126 & 132) described a variety γ *odontostoma* from Tirol and Norway of *Pupa minutissima* Hart. (= *Tr. cylindrica* Fér.), with a "dente punctiformi in palato non procul ab insertione marginis exterioris". Afterwards he mentions it (1887, p. 128, No. 119) as a species "mit 1 punktfögen Zahn tief innen an der Wand u. 1 tropfenfögen Zahn hoch oben im Gaumen, nahe der Naht u. vom Aussenrande z. entfernt", indicating as locality only "Norwegen b. Kristiania". Odhner (1924, p. 4) has seen the types of the var. *odontostoma*, but writes "Der Typus liegt als *P. minutissima* var. *odontostoma* West. im Museum zu Gothenburg in drei Exemplaren vor. Alle Stücke erwiesen sich in allen Einzelheiten mit *T. cylindrica* identisch... und die Mündung zeigte keine Spur von Zähnen" and concludes "*Pupa odontostoma* ist somit auch nicht als Varietät aufrecht zu halten".

Draparnaud (1805, p. 59, pl. 3, figs. 26, 27) also mentions a form of *Pupa muscorum* (= *Tr. cylindrica* Fér.) with "Aperturâ 1—2 dentatâ" and figures it on pl. 3. Fig. 26 is too small to discern anything clearly, but fig. 27, which is enlarged after the former, shows us a distinct parietal lamella. On account of its whole shape, viz., a slightly conic cylinder, it has little conformity with *Tr. cylindrica*; at all events, on account of these figures one cannot make out whether it is a variety of *Tr. cylindrica* or not. In his Manual (1921) Pilsbry gives on p. 67 the opinion that Draparnaud had here more than one species "the *cylindrica* (commonly known as *minutissima*), together with *rivierana* or an allied dentate form from somewhere in the south of France".

A dentate variety of *Vertigo muscorum* (Drap.) (= *Tr. cylindrica* Fér.) from Pech-David près de Toulouse and Montpellier is also described by Moquin-Tandon (1855, p. 399, pl. 28, fig. 24). His diagnosis follows: „ γ *dentiens*. Ouverture avec 1, rarement 2, plis dentiformes sur le milieu de l'avant dernier tour." The aperture of the variety is represented on an enlarged scale and shows a little parietal lamella, the outlines of the mouth bear a certain resemblance to those of *Tr. cylindrica*, but as the whole shell is not represented, it is difficult to decide if we really have to do here with a dentate variety of the latter "Was var. *dentiens* Moq. Tand. ist," writes Boettger (1879, p. 66), "habe ich leider nicht ergründen können, doch vermute ich fast, dass, da Moquin-Tandon von einer zweizähligen

Form spricht, ihm theilweise wenigstens Exemplare von *P. Strobeli* Gredl. mit undeutlich entwickeltem Columellarzahn vorgelegen haben", whilst Pilsbry (1921, p. 74) remarks that it may be *Tr. rivierana* or var. *scharffi*. Wholly unknown is this var. *dentiens* M.-Td. to Reinhardt (1916, p. 161) and he writes in connection herewith "Unter den Hunderten von Exemplaren der *cylindrica*, die ich unter den Händen gehabt habe, ist mir nie ein Stück mit einem Parietalzahn vorgekommen," though he does not deny the possibility of the existence of a dentate form of *Tr. cylindrica*.

It results from a comparison with descriptions, figures and specimens of the remaining species of this genus, which inhabit Europe, that the sole species with which the specimen from Katwijk has some resemblance, are *Tr. claustralis* (Gredl.) and *Tr. strobeli* (Gredl.) (= *Tr. rivierana* Bens.). The former, at least, corresponds as far as concerns the position of the palatal fold. That this was indeed the sole character, wherein our *Truncatellina* resembled *Tr. claustralis*, was shown by a comparison with a series of specimens of this species, amongst which a number of ten collected by Gredler himself. *Tr. claustralis* is, i.a., more strongly costulate, more tapered towards the base and with a rounded-triangular aperture. Its habitat, moreover, is more south- and eastwardly situated. The localities where it is found the nearest to the Netherlands, are in the South the drift debris of the Garonne near Bordeaux (Boettger, 1879, pp. 66 & 67) and in the South-East the Mähren northward of Brünn (Uličny f. Ehrmann, 1933, p. 45).

To *Tr. strobeli* (Gredl.), which, as Geyer (1927, p. 122) expresses it, is "einer kurzen *cylindrica* ähnlich," our specimen resembles somewhat more, especially by its size, its fine sculpture and its silky luster; but it differs entirely from this species by the situation of the palatal fold, which by *Tr. strobeli* is visible in a direct front view and not concealed behind the columella. The area of dispersion of the latter is also more southwardly situated, the most northern localities where it is found are Garonne river drift near Bordeaux (Boettger, 1879, pp. 66 & 67) and further Montreux, Neuchatel, Partenkirchen, Innsbruck (Ehrmann, 1933, p. 44).

To make a new species of the *Truncatellina* collected at Katwijk, on account of a single specimen, appears to me too premature, principally if one considers the variability of the species in this genus. It is safer, therefore, as long as no more material is found, to consider our specimen provisionally as a strongly differing form of *Tr. strobeli* (Gredl.) and to name it var. *hooveni*.

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