

Notes on Land and Freshwater Mollusca of South-Eastern France

by
L. A. W. C. VENMANS

In August 1954 I was fortunate to enjoy the well-known hospitality of the Reverend Benedictine Fathers in their beautiful and famous abbey of Hautecombe on the west coast of the Lac du Bourget, Savoy, France. The sojourn gave me a welcome opportunity of studying the molluscan fauna of the neighbourhood. Afterwards I crossed to Aix-les-Bains, went by rail to Valence, and proceeded on my journey northward through the valley of the Rhône as far as Lyons.

At some 30 km north of Valence the little village Erôme is situated between the rich vineyards on the east and the Rhône on the west, and it was there that through the hospitality of a Dutch clergyman, the Rev. Father VERSTEEGE, I was again enabled to do some snail collecting.

To him and to the kind Benedictines of Hautecombe, as well as to my friend, the Dutch artist-painter BERT OTTEN, who added much to the success of my collecting, I wish to express once more my heartiest gratitude.

Because of a continuance of very bad weather it was impossible to do any sieving work, but nevertheless we could collect at the localities 1—7, of which — except for Aix-les-Bains — as far as I can see, no reports of molluscs have ever been published.

In July and August 1955 Mr. BERT OTTEN undertook another journey through the southern part of the Rhône-basin, where he collected a number of land and freshwater molluscs at the localities 8—22, and kindly added them to my collection.

The present paper is based on the material collected during the above mentioned journeys and incorporated in the author's collection. The arrangement of the species and their nomenclature are in accordance with the system of J. THIELE's „Handbuch der systematischen Weichtierkunde”, Jena, 1931. The numbers in parenthesis after the localities indicate the numbers of specimens collected there.

For the determination of some dubious specimens I wish to thank once more Prof. Dr. WERNER BLUME of Göttingen, Germany; Dr. H. E. QUICK of Reading, England; Prof. Dr. GILBERT RANSON and Mr. J. M. GAILLARD of Paris, France; Prof. Dr. S. JAECKEL of Berlin, Germany. To Dr. F. E. LOOSJES of Wageningen, Netherlands,

I am indebted for the determination of the Clausiliidae; to Dr. HANS SCHLESCH of Stubbeköbing, Denmark, for providing me with *Pomatias* material from Malta; and last, but not least to the late Mr. HUGH WATSON of Cambridge, England for reading the manuscript.

The material was collected at the following localities (see Map, fig. 1):

1. Aix-les-Bains, Dépt. Savoie, 21—VIII—1954. On and in the neighbourhood of a limestone wall grown over with moss and ivy along a park on the east of the town; near the wall under shrubs, trees and herbs.
2. Hautecombe, Dépt. Savoie, 22—VIII—1954. On and near old walls on the grounds round the abbey, which is situated on a protruding rock of the Charvaz, one of the mounts of the Montagne du Chat. The soil consists of limestone of the Urgonian (Lower Cretaceous). At the lake-side the kitchengarden of the abbey, the orchard and the annexes are situated on several terraces, which are surrounded and separated from each other by higher or lower limestone walls.
3. Hautecombe, Dépt. Savoie, 22—VIII—1954. On the slope of the Charvaz, which shows a rich vegetation of trees, shrubs and herbs, on and near the little walls along the footpaths winding up the slope.
4. Hautecombe, Dépt. Savoie, 23—VIII—1954. On and under chestnut and walnut trees, on limestone between the grass and plants of a meadow on the slope of the Charvaz.
5. Hautecombe, Dépt. Savoie, 23—VIII—1954. On trees, herbaceous plants and limestone rocks along the thoroughfare leading up to Pierre-de-Courtille.
6. Along the road between Lucey and Chanaz, north of Hautecombe, Dépt. Savoie, 23—VIII—1954.
7. Erôme, Dépt. Drôme, 26—VIII—1954. On herbs and shrubs, and on and under stones near the Maria chapel; along the roadside on little walls near the Rhône.
8. La Paillasse, Dépt. Drôme, 30—VIII—1954. About 30 km south of Valence, along the small river Veôre.
9. La Roche, Dépt. Drôme, 31—VIII—1954, about 10 km north of Valence, on an old wall.
10. Beaumont, Dépt. Drôme, VIII—1955, near the church wall.
11. Saillans, Dépt. Drôme, VIII—1955, on the face of a rock.
12. Montélimar, Dépt. Drôme, VIII—1955, at the base of an old wall.
13. Jansac, Dépt. Drôme, VIII—1955.
14. Pontaix, Dépt. Drôme, VIII—1955.
15. Rochemaure, Dépt. Ardèche, VIII—1955, in a well in a chasm.
16. Baix, Dépt. Ardèche, VIII—1955.
17. Arles, Dépt. Bouches-du-Rhône, VIII—1955, at the base of an old church.
18. Bel Air, near Jalon, Dépt. Bouches-du-Rhône, VIII—1955.
19. Cassis, Dépt. Bouches-du-Rhône, VIII—1955, at the base of a massif.
20. Tarascon, Dépt. Bouches-du-Rhône, VIII—1955, at the base of a viaduct.
21. Sanary, Dépt. Var, VIII—1955, in a meadow.
22. Rampale, Dépt. Var, VIII—1955.

GASTROPODA PROSOBRANCHIA

Theodoxus (Theodoxus) fluviatilis (Linné), loc. 3 (1). One single specimen found dead on the slope of the Charvaz.

Cochlostoma (Cochlostoma) septemspirale (Razoumowsky), loc. 1 (58), loc. 2 (48), loc. 3 (15), loc. 4 (72), loc. 5 (4), loc. 6 (7), loc. 8 (11), abundant or very abundant everywhere.

Cochlostoma (Obscurella) apricum (Mousson), loc. 4 (1). This rather scarce species is known from the mountains of Savoy and the Dauphiné. I found only a single specimen among the numerous specimens of *Cochlostoma septemspirale*, from which it differs in its more pyriform aperture, the growth-lines of the operculum, and the larger dimensions.

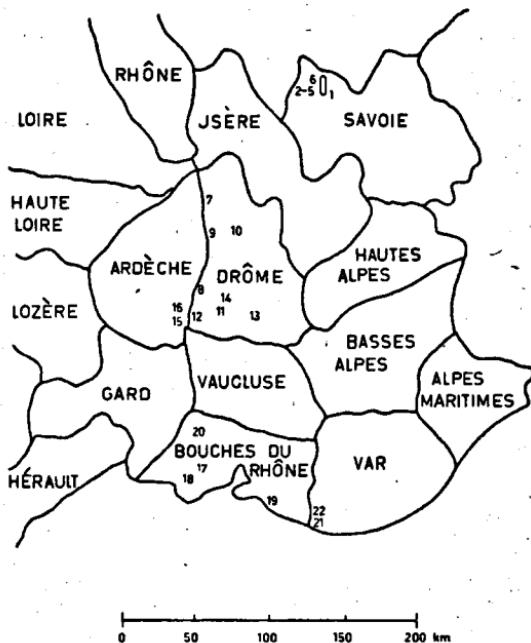


Fig. 1. Situation of the localities. Explanation in the text.

Pomatias elegans (Müller), loc. 1 (40), loc. 2 and 3 (25), loc. 4 (18), loc. 6 (2), loc. 7 (26), loc. 8 (9), loc. 9 (17), loc. 11 (6), loc. 12 (3), loc. 13 (3), loc. 16 (4), loc. 17 (9), loc. 19 (4), loc. 21 (3), abundant everywhere under fallen leaves or stones, sometimes also at the base of an old wall. According to GERMAIN (1931) the species is generally xerophile. I can state, however, that,

though I found the species abundantly on the dry slopes of the Charvaz, in Aix-les-Bains I met more specimens under and between the very wet leaves near a wall than on the dryer places more remote from it. Near Hautecombe I found large quantities in the wettest places, especially under and between heaps of stones. In the non-calcareous localities in the Rhône-valley the species was common everywhere, but not so abundant.

Pomatias sulcatus (Draparnaud), loc. 19 (2). This interesting and beautiful species, which is known from South Italy, Sicily, Malta, and Tunisia, and also from the diluvial strata near Menton and Nice, and even in the province of Girona in Spain, has been found still living in France in a number of localities between Cape Couronne and Toulon in the départements des Bouches-du-Rhône, du Var, and des Alpes Maritimes.

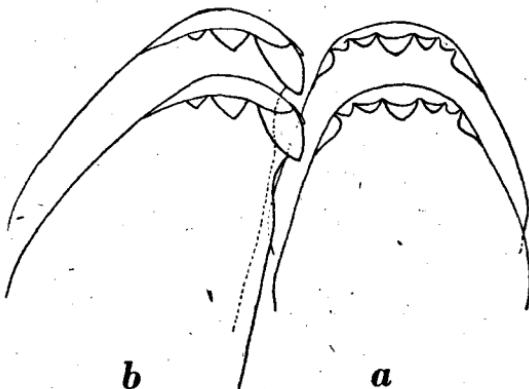


Fig. 2, a: central teeth of *Pomatias sulcata* (Drap.), coll. Venmans, No. 7191; b: lateralia of the same.

To the best of my knowledge the radula, which is quite different from the radula of *Pomatias elegans* (Müller) (cf. VERDCOURT, 1947), has not been described or figured until now. I could examine and mount the radulae of both specimens. One of them has a length of 6 mm and consists of 274 transverse rows. The second one has a length of 5.8 mm and consists of 215 rows. When flattened the breadth of each of them is about 1 mm. The dentition formula is 2 : 1 : 1 : 1 : 2.

The central tooth (Fig. 2a) is well developed and has a height and a maximal breath of 0.1 mm. It bears seven well marked, rather blunt cusps, of which the middle one is the strongest. The front edge is conspicuously convex, the sides gradually diverge towards the base, which is about twice as broad as the front edge.

The lateral teeth (Fig. 2b) are large and have five well developed cusps, of which the median one is the largest. The side nearest the central tooth is almost straight, the other side is strongly convex.

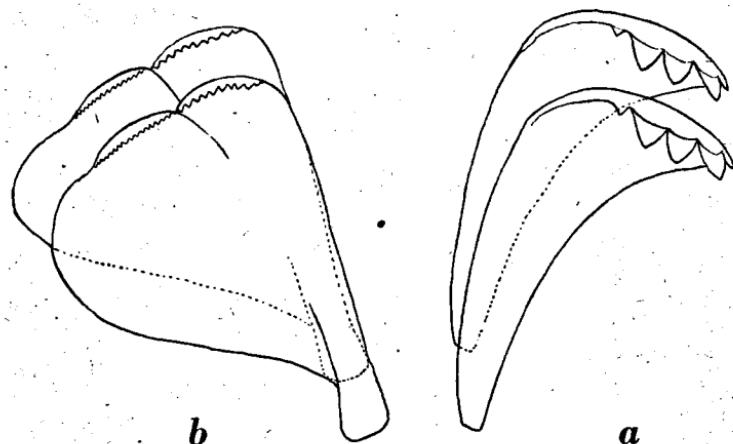


Fig. 3, a: inner marginals of *Pomatias sulcata* (Drap.), coll. Venmans, No. 7191; b: outer marginals of the same.

The inner marginals (Figs. 3a & 4) have five cusps, the sides are rather strongly convergent towards the base. The outer marginals (Fig. 3b) show a very different form and are fan-shaped, the margin nearest to the centre of the radula being almost straight. The reflected anterior edge is divided into three parts; the inner part bears 10 small, rather pointed cusps; the middle part, which is connected with the inner one at a sharp angle, has about 15 narrower cusps, while the outermost part is very thin and has no cusps at all. The basal plate has a thick projection, which points transversely inwards.

GERMAIN (1931, p. 572) considered *Pomatias melitensis* (Sow.) as identical. Through the kindness of my friend, Dr. HANS SCHLESCH, I was able to examine and compare four shells of *Pomatias melitensis*; which were found in Malta (Mistra), and are now in my collection (Nr. 8374). Though they differ from the Cassis specimens in some respects, GERMAIN may indeed be right, because the species seems to be very variable. In general the specimens from S. France are larger, the whorls are more convex, the colour is brighter and more reddish than in those from Malta, and there is only a narrow brownish band beneath the

periphery, whereas the Maltese specimens are deeper coloured and show, besides the narrow brownish band beneath the periphery, which lies between two narrow greyish areas, a brownish colour on the upper part of the whorls.

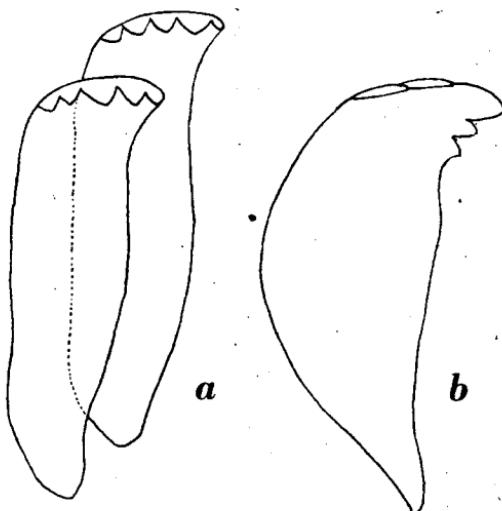


Fig. 4, a: inner marginals of *Pomatias sulcata* (Drap.), front view, coll. Venmans, No. 7191; b: inner marginal of the same, Sideview.

The specimens from Malta have the following measurements:

Number of Whorls	Height of shell	Maj. diam. of shell	Index	Height of aperture	Breadth of aperture
5½	16.4 mm	10.9 mm	66	6.8 mm	6.7 mm
5¾	13.0	9.0	69	5.9	5.0
5	13.0	9.3	72	6.0	5.4
4¾	12.8	9.0	70	5.7	5.0
those from Cassis:					
5¼	16.8	12.9	77	7.8	7.4
5	16.8	13.3	79	8.0	7.4

Also the number of longitudinal striae is less in the Maltese specimens (about 20 striae on the last whorl) than in those from Cassis (about 30 striae on the last whorl).

HUGH WATSON kindly sent me on loan the radula of a specimen of *Pomatias melitensis* (Sow.) mounted by himself 53 years ago. It appeared that this radula was smaller (5.1×0.7 mm) than the radulae of my French specimens, and showed 232 transverse rows of teeth, but for the rest agreed closely with them. Besides the

smaller dimensions of the radula, only the outer marginals show some insignificant differences: their reflected anterior edge is also divided into three parts, but the inner part has only seven cusps instead of ten, while on the middle part I could count only 14 instead of 15 cusps. This insignificant disparity may be of an individual nature; the smaller dimensions of the Maltese radula itself may be an indication that it has been extracted from an immature shell, while it is also possible that in Malta the species may not grow so large as it does in southern France, if it be the same one. Anyhow, the similarity of the shells and radulae may be sufficient to suggest that they possibly belong to the same species, but is not enough to prove that they do, without any other evidence. In order to make sure, a comparative study of more material than I had at my disposal will be necessary.

Bitbynia (Bitbynia) tentaculata (Linné), loc. 15 (26).

GASTROPODA PULMONATA

Carychium tridentatum (Risso), loc. 1 (1).

Carychium minimum Müller, loc. 8 (1).

Physa acuta Draparnaud, loc. 18 (1).

Lymnaea (Stagnicola) palustris (Müller), loc. 15 (12).

Lymnaea (Galba) truncatula (Müller), loc. 18 (15).

Planorbis (Planorbis) planorbis (Linné), loc. 15 (4). The specimens belong to the forma *lemnarium* Astre, which has been described from Pontoise in the département Seine-et-Oise, and, according to GERMAIN, l.c., p. 522, foot-note, also occurs almost everywhere among the typical specimens. The forma *lemnarium* Astre differs from the typical form of the species in the conspicuous concavity of the upper as well as of the lower side, the slower increase of the whorls, the more basal position of the carina, and the more rounded form of the aperture.

Of the four specimens two are nearly adult, one of which has $4\frac{3}{4}$, the other 5 whorls. Their height is about 3.5, their major diameter 12.5 mm.

Succinea elegans Risso, loc. 15 (2), loc. 18 (37).

Succinea fagoti Bourguignat, loc. 7 (1). This rather rare form, which, according to GERMAIN (l.c., p. 473), occurs at various localities throughout France, is known fossil from the valley of the Rhône. Our specimen — an empty shell from near the Rhône — does not seem to be fully adult; it has a height of 8 and a major diameter of 3 mm. The number of whorls is $3\frac{1}{2}$.

Cochlicopa lubrica (Müller), loc. 2 (22), loc. 8 (10), abundant between the grass-stems and under stones. Most of the specimens from

Hautecombe are immature, and the two or three mature ones are small stunted forms. Two of them show the following measurements in mm: height 4.75, 4.90, breadth of both 2.3. Though the measurements agree with those which QUICK (1954) found for his material from England of *Cochlicopa lubricella* (Porro), the relative shortness of the shells and the tumidity of the whorls give them a general appearance which is evidently that of *Cochlicopa lubrica* (Müll.). To this conclusion QUICK, who studied my material, also came. The adult shells from La Paillasse have the following measurements in mm:

Height: 5.6 — 5.7 — 6.1 — 5.8 — 5.6 — 6.0 — 5.4

Breadth: 2.5 — 2.5 — 2.6 — 2.4 — 2.3 — 2.5 — 2.3

The general appearance of these shells suggests that we have to do with *Cochlicopa lubricella* (Porro), but the breadth is greater than QUICK has found it in his British examples of this species. Therefore, though these shells are puzzling, I have listed them, in accordance with QUICK, as *Cochlicopa lubrica* (Müller).

This fully agrees with the results of NILSSON's study (1956) on the European *Cochlicopa* group. NILSSON distinguished within the collective *Cochlicopa lubrica* (Müller) two conspicuously different species: *C. nitens* (Kokeil) Gallenstein, and *C. minima* Siemaschko [= *C. exigua* Menke, *C. columnata* Clessin, and *C. lubricella* (Ziegler) Porro]. *C. nitens* Gallenstein has been found with certainty in Sweden, Denmark, the Baltic States, Russia, Poland, Germany, Austria and Switzerland, but nothing is known about its occurrence in France. *C. minima* Siemaschko has about the same European distribution as the typical *C. lubrica*, which is found all over Europe and is a common species also in France.

As to the measurements, NILSSON comes to the conclusion that the size of the shells of *C. nitens* varies between 6.0 and 8.5 mm in height, and between 2.7 and 3.5 mm in breadth; the size of *C. minima* between 3.5 and 5.0 mm in height, and between 1.5 and 2.1 mm in breadth, the size of the typical *C. lubrica* ranging intermediately between about 5.0 and 6.0 mm in height, and 2.1 and 2.7 mm in breadth.

Pyramidula rupestris (Draparnaud), loc. 2 and 3 (100), loc. 4 (19), loc. 6 (1), everywhere very abundant, especially on rocks and walls, and on and under stones.

Columella edentula (Draparnaud), loc. 3 (11), rather abundant on walls.

Truncatellina cylindrica (Férussac), loc. 17 (3).

Truncatellina rivierana (Benson), loc. 8 (8), loc. 9 (7), loc. 14 (86).

Vertigo pygmaea (Draparnaud), loc. 8 (12), loc. 10 (1).

Vertigo angustior Jeffreys, loc. 8 (1). The specimen belongs to the forma *nana* Michaud.

Pupilla (Pupilla) bigranata (Rossmässler), loc. 8 (1).

Pupilla (Pupilla) muscorum (Linné), loc. 8 (9). The specimens belong to the forma *unidentata* C. Pfeiffer.

Lauria (Lauria) cylindracea (Da Costa), loc. 2 and 3 (20), loc. 4 (11), loc. 8 (6), loc. 17 (5), loc. 19 (39).

Pagodulina pagodula (Desmoulins), loc. 3 (1). The specimen is juvenile and has only $5\frac{1}{2}$ whorls. The parietal lamella is clearly visible.

Orcula doliolum (Bruguière), loc. 3 (2). On a low wall.

Abida frumentum (Draparnaud), loc. 2 (2), loc. 4 (6).

Abida variabilis (Draparnaud), loc. 7 (86), loc. 8 (14), loc. 18 (1).

Abida polyodon (Draparnaud), loc. 16 (1), loc. 19 (2).

Abida secale (Draparnaud), loc. 14 (3).

Granopupa granum (Draparnaud), loc. 19 (29).

Chondrina (Chondrina) avenacea (Bruguière), loc. 2 and 3 (100), loc. 2 (2), loc. 4 (74), loc. 6 (4), loc. 8 (6), loc. 13 (8), loc. 22 (60).

Chondrina (Solatopupa) similis (Bruguière), loc. 15 (54), loc. 19 (49).

Among the localities of this species in France GERMAIN does not mention the département d'Ardèche, so that loc. 15 (Roche-maure) seems to be new.

Acanthinula (Acanthinula) aculeata (Müller), loc. 3 (2). One of the specimens is adult and has 4 whorls, the second one has only 3.1 whorl and is still juvenile. Both specimens possess large spines and belong to the typical form.

Vallonia pulchella (Müller), loc. 4 (1), loc. 8 (8).

Vallonia costata (Müller), loc. 1 (1), loc. 2 (3), loc. 3 (4), loc. 4 (1), loc. 9 (1), loc. 17 (9), loc. 19 (1).

Jaminiia (Chondrula) tridens (Müller), loc. 7 (15). Abundant in and on the soil under stones.

Jaminiia (Jaminiia) quadridens (Müller), loc. 7 (47), loc. 8 (11), loc. 9 (3), loc. 12 (69), abundant or very abundant everywhere.

Jaminiia (Jaminiia) quadridens niso (Risso), loc. 9 (1). According to GERMAIN this form, which lacks the dentition on the outer lip, is rather rare and is known especially from the coast region between Nice and Cette, and is also found in the neighbourhood of Nîmes, département du Gard, and Carpentras, Mount Ventoux, département de Vaucluse. Apparently La Roche, département de la Drôme, is a new locality.

Zebrina detrita (Müller), loc. 9 (19), loc. 11 (5), loc. 12 (1), loc. 18 (1).

Though this species, which is not very common in France, is mentioned by GERMAIN from a number of localities in the eastern, central and southern départements, it is not recorded by that author from the département des Bouches-du-Rhône, so that the locality Bel Air near Jalon seems to be new.

Ena obscura (Müller), loc. 1 (1), loc. 3 and 4 (9), loc. 8 (7), loc. 9 (7), loc. 13 (1), loc. 14 (3), loc. 15 (3), loc. 17 (1).

Clausilia (Iphigena) ventricosa Draparnaud, loc. 4 (1), loc. 8 (2).

Clausilia (Iphigena) lineolata Held, loc. 2 (2), loc. 3 (2), loc. 4 (13), loc. 5 (1), loc. 8 (3). According to GERMAIN this species has not been found until now further south than the département de l'Isère and de la Savoie. La Paillasse in the département de la Drôme is a new and the southernmost known locality in France.

Clausilia (Iphigena) plicatula Draparnaud, loc. 1 (1).

Clausilia (Clausilia) bidentata (Ström), loc. 4 (20), loc. 8 (3).

Clausilia (Clausilia) parvula (Studer), loc. 1 (30), loc. 2 (300), loc. 3 (17), loc. 4 (88), loc. 5 (5), loc. 6 (1), loc. 7 (5), loc. 8 (32).

Cochlodina laminata (Montagu), loc. 4 (25).

Papillifera solida (Draparnaud), loc. 19 (2).

Caecilioides (Caecilioides) acicula (Müller), loc. 8 (10), loc. 12 (5), loc. 14 (3), loc. 19 (1).

Caecilioides (Caecilioides) eburnea (Risso), loc. 10 (7), loc. 19 (1), loc. 21 (3).

Rumina decollata (Linné), loc. 17 (66).

Testacella haliotidea (Draparnaud), loc. 12 (1).

Punctum (Punctum) pygmaeum (Draparnaud), loc. 14 (2).

Discus (Goniodiscus) rotundatus (Müller), loc. 2 (46), loc. 3 (9), loc. 4 (20), loc. 7 (2), loc. 8 (27).

Vitrea (Vitrea) crystallina (Müller), loc. 2 (1), loc. 8 (1).

Retinella (Retinella) nitens (Michaud), loc. 6 (1).

Retinella (Aegopinella) pura (Alder), loc. 11 (1), loc. 12 (2).

Retinella (Perpolita) hammonis (Ström), loc. 4 (1).

Oxychilus (Oxychilus) draparnaldi (Beck), loc. 1 (15), loc. 4 (7), loc. 5 (4), loc. 7 (26), loc. 9 (1), loc. 17 (3).

Oxychilus (Morlina) viliae (de Mortillet), loc. 8 (3), juveniles. According to GERMAIN the species was hitherto known only from Corsica and from the département des Alpes Maritimes. It differs from *O. cellarius* (Müll.), of which it seems to be only the southern form, in its more depressed shell, its greater size and its wider umbilicus.

Zonitoides (Zonitoides) nitidus (Müller), loc. 8 (3).

Euconulus (Euconulus) fulvus (Müller), loc. 3 (1), loc. 8 (2).

Helicella (Candidula) gigaxi (Pfeiffer), loc. 7 (50), loc. 8 (1), loc. 9 (10).

Helicella (Candidula) unifasciata (Poiret), loc. 2 (50), loc. 3 (23), loc. 4 (11), loc. 7 (140), loc. 8 (25), loc. 12 (35), loc. 13 (5), loc. 14 (6), loc. 19 (10).

Helicella (Cernuella) xalonica canovasi (Servain), loc. 13 (6).

Helicella (Trochoidea) conica (Draparnaud), loc. 19 (6), loc. 21 (20), loc. 22 (5). GERMAIN does not mention the département du Var for this species. He mentions the départements des Pyrénées-Orientales, de l'Aude, de l'Hérault, du Gard, and des Bouches-du-Rhône, and says that it is rare in the Alpes Maritimes. The finding of 20 specimens near Sanary and Rampale suggests that the species is not at all uncommon in the département du Var.

Helicella (Trochoidea) scitula (Cristofori & Jan), loc. 20 (54), loc. 21 (11), loc. 22 (1).

Helicella (Jacosta) explanata (Müller), loc. 21 (6). This species is rare in the eastern Pyrenees; it is somewhat commoner in the département de l'Hérault (near Sète), and again rare in the département des Bouches-du-Rhône. According to GERMAIN it is nearly extinct in the départements du Var and des Alpes Maritimes, where only subfossil shells are found (e.g. between Cannes and Antibes). The six young specimens collected alive in a meadow near Sanary prove that the species is still living in the département du Var.

Helicella (Xerocincta) neglecta (Draparnaud), loc. 7 (1).

Helicella (Helicella) ericetorum (Müller), loc. 7 (53), loc. 8 (2), loc. 11 (1), very abundant on low vegetation.

Helicella (Xerotricha) conspurcata (Draparnaud), loc. 20 (21), loc. 21 (19).

Cochlicella acuta (Müller), loc. 15 (3), loc. 19 (13).

Cochlicella ventrosa (Férussac), loc. 21 (30).

Monacha (Monacha) cartusiana (Müller), loc. 7 (8), loc. 8 (3), loc. 13 (10).

Monacha (Monacha) cemenelea (Risso), loc. 18 (2).

Hygromia cinctella (Draparnaud), loc. 1 (8), loc. 2 and 3 (2), loc. 4 (1), loc. 7 (16), loc. 8 (6), loc. 18 (2).

Trichia (Trichia) bispida (Linné), loc. 8 (22), loc. 15 (2).

Euomphalia (Euomphalia) strigella (Draparnaud), loc. 4 (1). Empty shell.

Helicodonta obvoluta (Müller), loc. 3 (1), loc. 5 (2), loc. 7 (1), loc. 14 (1).

Helicigona (Helicigona) lapicida (Linné), loc. 2 and 3 (60), loc. 5 (3), loc. 14 (5).

Theba pisana (Müller), loc. 20 (11), loc. 21 (1).

Cepaea nemoralis (Linné), loc. 2 (1), loc. 8 (1).

Helix (Cryptomphalus) aspersa (Müller), loc. 1 (1), loc. 7 (1), very abundant everywhere.

LAMELLIBRANCHIA

Dreissena (Dreissena) polymorpha (Pallas), loc. 4 ($\frac{1}{2}$). One left valve.

The specimen was found on a meadow on the slope of the Charvaz.

REFERENCES

- GERMAIN, L., 1930—1931. Mollusques terrestres et fluviatiles. Faune de France, parts 21 and 22. Paris.
- NILSSON, A., 1956. *Cochlicopa nitens* (Kokeil) Gallenstein und *C. minima* Siemaschko, zwei selbständige Arten im Formenkreis der kollektiven *C. lubrica* (Müller). Arkiv för Zoologi (2), vol. 9, no. 8, pp. 281—304.
- QUICK, H. E., 1954. Cochlicopa in the British Isles. Proc. Malac. Soc. London, vol. 30, pp. 204—214.
- VERDCOURT, B., 1947. The radulae of the British non-marine mollusca, III. The Microscope, vol. 6, pp. 230—233.