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ALBERTUS SEBA'S „LOCUPLETISSIMI RERUM NATURALIUM THESAURI...." (1734-1765) AND THE „PLANCHES DE SEBA" (1827-1831)

by

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INTRODUCTION

The present note is the result of an investigation into the correct date of publication of the third volume of A. Seba's great work "Locupletissimi rerum naturalium thesauri...". In my own studies on Crustacea I accepted the year 1761 as correct, following in this Engelmann (1846) and the title page of the copy of Seba's book that I consulted. Dr. M. Boeseman, ichthyologist of the Rijksmuseum van Natuurlijke Historie, pointed out to me that in ichthyological literature the year of publication of this volume is practically always cited as 1758. Also Engel (1937) in his biography of Seba gave this later date. In trying to straighten this question out I obtained the most cordial help from Dr. Boeseman, Prof. Dr. H. Engel, former director of the Zoological Museum of Amsterdam, and from Mr. P. Tuyn, librarian of the Amsterdam Zoo, all of whom I like to tender my best thanks. The result of my efforts was rather unexpected, as it proves that neither 1758 nor 1761, but 1759, is the correct year of publication of volume III. The dates of publication of the other volumes have never given rise to any controversy and are always correctly cited.

It was thought to be of interest to give here also all the information known to me dealing with the set-up of Seba's work, its authors and artists and the history of its publication. Most of the details are taken from Engel's (1937, 1961) publications on Seba, which form the most important sources on Seba's life, work and personality.

I have added a note on the dates of publication of the little known 1827-

1831 French re-issue of the plates of Seba's work, the so-called "Planches de Seba".

For the illustrations given here as text-fig. 1, and pls. 1 and 2, I am most indebted to Mr. Tuyn.

ALBERTUS SEBA AND HIS CABINET

Albertus Seba (pl. 1) was born 13 May 1665 in Etzel, Ostfriesland, N.W. Germany and died 2 May 1736 in Amsterdam. As a young man Seba travelled extensively in western Germany and Holland to learn the apothecary trade. He settled in Amsterdam in 1696 and became a well known and prominent citizen of that town. As a pharmacist he amassed a considerable fortune there, and devoted much time and money to his interests in natural history. He brought together a remarkably fine cabinet of natural curiosities that became world famous. A masterly account of Seba's life is given by Engel (1937:75-100), whose paper contains a wealth of detailed information on this interesting person and his time. In a later paper Engel (1961) gave some additional details on Seba.

As already remarked above, Seba is best known for his very rich natural history collections which contained objects from all over the world. The very busy port of Amsterdam with ships coming in from many far away regions, offered Seba excellent opportunities to assemble the objects for his cabinet. In 1717 he sold his first collection to Czar Peter the Great of Russia (for 15,000 guilders according to Engel, 1937: 82), but started right away making a new one.

THE "LOCUPLETISSIMI RERUM NATURALIUM THESAURI" AND ITS PUBLICATION

Seba published a work containing descriptions and figures of the objects of his collection. This magnificent publication consists of four large folio volumes containing 449 plates and an explanatory text. It was published in two editions, which appeared simultaneously and which are exactly alike except for the language of the text. In one edition the text is given both in Latin and Dutch, in the other in Latin and French. This work is best known under the Latin title "*Locupletissimi rerum naturalium thesauri accurata descriptio, et iconibus artificiosissimis expressio per universam physices historiam*" (pl. 2); the Dutch title is "*Naaukeurige Beschrijving van het schatrijke Kabinet der voornaamste Seldzaamheden der Natuur van den Heer A. Seba*", and the French title "*Description exacte des principales curiositez naturelles du magnifique Cabinet d'Albert Seba*". Usually the book is indicated in short as the "Thesaurus".

On 30 October 1731 Seba made the contract for the publication of this work with two publishers: Mr. Hendrik Janssonius van Waesberge and the firm of Messrs. J. Wettstein & W. Smith, both at Amsterdam. Engel (1937: 89, 90) described the details of the transaction as follows: "The two publishers and Seba each had to pay one third of the costs. The whole work had to consist of 400 plates in 4 volumes. Seba gets 20 copies of each with 20% discount, 10% for more copies. The publishers get 25% for the distribution. If all is sold, except 75 copies, the three parties will get one third of the profit each".

As to the price of each volume, Anon. (1759:343) stated: "Dit werk, 't geen aan de Inteekenaren voor 40 gl. ieder Deel wordt afgeleverd, is ook, met de natuurlyke koeleuren afgezet voor 200 gl. ieder Deel te bekomen" (this work, which is offered to the subscribers for 40 guilders per volume, can also be obtained with the plates painted in the natural colours for 200 guilders per volume). Engel (1937:90) indicated that the post-publication price for an uncoloured copy was 58.80 guilders.

When Seba died in 1736 two volumes had been published with an interval of one year (volume I in 1734, volume II in 1735). The many difficulties involving the settling of Seba's estate delayed the publication of the last two volumes (III and IV) considerably. The firm of Wettstein & Smith then evidently dropped out of the picture, because when finally the third volume was published, the 1758 title page mentioned as only publisher "Janssonio-Waesbergios". After the death of H. Janssonius van Waesberge, about 1760, the publication of the work was taken over by the bookdealers H. K. Arkstee & H. Merkus, and P. Schouten, both of Amsterdam, who bought all the remaining copies of volumes I, II and III from the heirs of Van Waesberge and from those of Seba (see: Anon., 1761: 263, 264). These publishers raised the price of volume I to 50 guilders, but kept those of the other volumes at the original pre-publication price of 40 guilders, indicating that the price would be raised after publication of volume IV. At the same time these publishers informed the public that the Latin/Dutch edition of volumes I and II was sold out but that of the Latin/French edition a few copies could still be obtained, while both editions of volume III were available. They reissued volume III with a new title page (see below).

THE ILLUSTRATIONS OF THE "THESAURUS"

The plates form the main interest of Seba's work. Instead of 400, as originally planned, no less than 449 were published (III, III, III and III, respectively, in volumes I to IV). Practically all were made under Seba's own supervision. Plates 32, 33, and 34 of volume III were added after

Seba's death by Arnout Vosmaer (1720-1799, director of the natural history cabinet of Prince Willem V, Stadholder of the Netherlands), who edited volumes III and IV. The other plates of volume III and those of volume IV were already made in Seba's lifetime (Anon., 1759:343: "het 4e. en laatste Deel, waarvan alle de Platen reeds by 't leven van den Hr. Seba in gereedheid gebragt zyn"). Ekama (1885-1888:145) stated that the plates of Seba's work were made by P. Tanjé, but Engel (1937:88, 89) showed that many artists were engaged to do the job of illustrating the work and he gave the names of those that signed their drawings: P. Tanjé (1729-1736), A. van der Laan, F. de Bakker (1733-1736), F. Morellon de la Cave, J. Folkema, J. Punt, W. Jongman, A. van Buysen, de la Croix (1735), and C. de Putter; the years given in parentheses are those in which, as far as is known, the artist worked for Seba. It is possible, of course, that Tanjé had the supervision over the other artists, and thus had the final responsibility for all the plates. Plates 32, 33 and 34 of volume III, which were added by A. Vosmaer, were drawn by J. van der Spijk. Seba prided himself that all drawings were originals made after specimens of his collection. Engel (1937:88) stated on this account: "... only the things that he possessed or at least had seen and studied were figured and no fantasies were copied from others...". There are a few instances, however, where the artist, perhaps without Seba knowing this, did copy older drawings, like pl. 21 fig. 12 of volume III which, as Holthuis (1959:118, pl. 11 figs. 1-3) has pointed out, is a copy of a copy of a figure published by Gesner in 1558. According to Engel (1937:90) Seba, on pl. 42 of volume I, seems to have made use of drawings of animals from the Cape of Good Hope, which drawings were lent him for that purpose by Herman Boerhaave (1668-1738, professor of medicine, botany and chemistry of Leiden University, and a physician of world fame). After Boerhaave's death these drawings came into the possession of Johannes Burman (1707-1779, professor of botany at Amsterdam University) in whose library they were found by Peter Simon Pallas (1741-1811, a German zoologist, who as a young man spent some time in the Netherlands (1760-1761, 1763-1767), and afterwards entered the service of the Empress Catherina II of Russia). Pallas compared these drawings with those reproduced by Seba and noted their similarity. Apart from commenting upon this, Pallas (1767:9) also remarked that Seba mixed figures from other sources with his own "Constat enim Sebam possim ex aliorum libris icones suis immiscuisse".

The quality of the far larger part of the plates is superb and a surprising percentage of the species figured is recognizable. Although Seba's text is very poor and non-binomial, the plates make Seba's work one of the more

important of its time, also for purposes of zoological nomenclature, as Linnaeus and many subsequent authors based new species upon figures from Seba's work.

THE TEXT OF THE "THESAURUS"

The text of Seba's work, as said above, is in Latin, Dutch and French. The Dutch text is the original and was written by Seba. Engel (1937:90) indicated that "Seba prepared the text of his work in Dutch, and later on it was translated for him into Latin by Gaubius" (= Hieronymus David Gaubius, 1705-1780, professor of medicine at Leiden University, who also translated J. Swammerdam's "Biblia Naturae" in Latin). Whether all the Dutch text of the four volumes was written by Seba and all the Latin text by Gaubius is by no means certain and not very likely. Engelmann (1846:195) stated: "Der Text is von *Gaubius*, *Musschenbroek* u. *Massuet* besorgt"; this is almost literally copied by Hagen (1863:148), neither saying whether the Dutch or Latin text is meant. Ekama (1884-1888:145) is somewhat clearer and said: "Texte latin et hollandais, dont le premier a été redigé par Gaubius, Musschenbroeke et Massuet". According to Engel (1937:90) Petrus van Musschenbroek (1692-1761, professor of medicine, mathematics and philosophy at Utrecht and later at Leiden University) and Gaubius both added to Seba's text. Also the editors of the volumes published after Seba's death, may have added to the text and made changes in it. The text on the fishes in volume III was mainly written by Petrus Artedi (1705-1735, a young Swedish zoologist and friend of Linnaeus, who in 1734 went to England and Holland, and worked for Seba; he drowned in an Amsterdam canal in 1735; his publications on ichthyology are so fundamental that he is called the "Father of Ichthyology"). Seba either used Artedi's notes as they were, or adapted them for his text (see also Merriman, 1941:65-69, pls. 1, 2; and Engel, 1951:51-66). Anon. (1759:342-343), stated in the announcement of volume III of the "Thesaurus": "de Visschen, waar van de *characters* door den beroemden *Artedius* zelven zijn opgeteekent" (the fishes, the characters of which are noted down by the famous Artedius). The French translation of the text is generally ascribed in part to L. Jaucourt (Engelmann, 1846:195; Hagen, 1863:148; Woodward, 1913:1889; Engel, 1937:90). This probably is true for volumes I and II as Engel (1961:120) showed that P. Massuet started the French translation of volumes III and IV, and that this was continued by a Dr. Ducloux under the supervision of Johannes Nicolaas Sebastiaan Allamand (1716-1787, professor of zoology at Leiden University). The French and Latin indices were prepared by J. B. R. Robinet (Woodward, 1913:1889; Engel, 1937:90).

THE SEPARATE VOLUMES

Volumes I and II. — These two volumes are the only ones which were published during Seba's lifetime. Volume I appeared in 1734, volume II in 1735. The correctness of these dates of publication has never been questioned and there is no reason for any doubt. Both volumes were published by Messrs. H. Janssonius van Waesberge and J. Wettstein & W. Smith. The Dutch text was by A. Seba, the Latin translation by H. D. Gaubius and the French translation probably by L. Jaucourt. Volume I contained an introduction by H. Boerhaave, volume II one by Johann Jakob Baier (1677-1735, a German professor of medicine at Nürnberg University, and well-known paleontologist). These two volumes deal mainly with mammals, birds, reptiles and amphibians, although here and there some insects (mostly butterflies and ants, but also a grasshopper), spiders, millepedes, scorpions, a few fishes and molluscs and some Crustacea are shown, scattered among the other objects. Volume I contains the greater part of the mammals, birds and amphibians, in volume II the reptiles, especially the snakes, are best represented. The illustrations are excellent, but they are arranged in a very haphazard way. The text is very mediocre. As mentioned above the Latin/Dutch edition of both was already sold out in 1761.

Volume III. — The publication of this volume was delayed because of many difficulties among Seba's heirs in connection with the settlement of his estate, which have been well described by Engel (1937:91-93; 1961:120). And even after the estate was finally settled in 1742 the heirs evidently could not agree on the further publication of the "Thesaurus". Finally it was Roeland Willem van Homrigh, who was married to Seba's youngest daughter Johanna, who in the end took the necessary steps for the publication of the third and fourth volumes (see Engel, 1961:120). To get the funds for the publication of these volumes, Seba's cabinet, which had already badly suffered from neglect, was auctioned on 14 April 1752. Engel (1961) described the sales catalogue and indicated a number of buyers; important among these was Arnout Vosmaer, whose cabinet was later (1756) bought by Princess Anna, the mother of the then 8 year old Prince Willem V, Stadholder of the Netherlands. Vosmaer then was appointed director of this "Kabinet des Stadhouders", which he developed to one of the best collections of its time.

As to the editor of volume III of the "Thesaurus", Cuvier (1828:109) stated that this volume was "livré au public en 1758, aux frais et par les soins de *Gaubius*". Woodward (1913:1889) stated: "Tom. III & IV were edited by H. D. Gaubius, P. Massuet, L. Jancourt and P. van Musschenbroek". Engel (1937:93; 1961:120), who had access to the archives of the Vosmaer family made it clear, however, that the actual editor of these volumes is the above

mentioned Arnout Vosmaer, this is confirmed by a statement by Anon. (1759: 342) saying “het derde deel: de Uitgever van hetzelfde, voor welken de be-dreeven Natuurkenner de Hr. *A. Vosmaer*, thans *Directeur* van het *Kabinet* der Natuurlyke en andere Kostbaarheeden van zyne Doorlugtigste Hoogheid, den Heere Prince van Orange enz. enz., gehouden wordt” (the editor of the third volume, who is generally considered to be Mr. A. Vosmaer, director of the cabinet of natural and other valuables of his Highness the Prince of Orange). Engel (1937:93) remarked that when Vosmaer took over, “part of the text and nearly all the plates for at least the third part were ready, though the plates had been spoiled by verdigris. Vosmaer made use of Seba’s MSS., which were found in his Library after his death”. Seba’s text evidently included Artedi’s notes on the fishes or a revised version of them. It is not known how much Seba changed in Artedi’s text and how much was changed later by Vosmaer in the text of both volumes III and IV. According to Engel (1961:120) Vosmaer in his editing job had the assistance of several naturalists of that time: Johannes Le Franc van Berkhey (1729-1812, a physician, who lectured in natural history at Leiden University; he was the owner of an important natural history collection and well known as author of “De Natuurlijke Historie van Holland”), Peter Simon Pallas, and Martinus Houttuyn (1720-1798, a physician of Amsterdam, who owned a rich natural history cabinet and wrote and translated numerous books on natural history, among which the 37 volume Dutch version of Linné’s *Systema Naturae*). It is possible that also P. van Musschenbroek and perhaps H. D. Gaubius added to the text of these volumes (Engel, 1937:90). The latin text of volume III of Seba’s *Thesaurus* may have been taken care of again by Gaubius, but this is nowhere specifically mentioned. According to Engel (1961:120) the French text was begun by P. Massuet and continued by a Dr. Ducloux under the supervision of J. N. S. Allamand (see above).

As to the plates of volume III, Vosmaer added to this volume plates 32, 33, and 34, the rest evidently are all made under Seba’s own supervision. Engel (1937:93; 1961:120) stated that “The copper plates of Volume III of Seba’s *Thesaurus* were in 1750 covered with verdigris” and “spoiled by verdigris”. They cannot have been very badly attacked by verdigris since the prints made from these same copper plates, both those made in 1759 and those made around 1828, are still excellent. Anon. (November 1828:284) specially remarked “que les cuivres . . . sont très bien conservés”.

As little ambiguity as exists about the date of publication of the first two volumes of the “*Thesaurus*” as much confusion is there about that of the third volume. Some authors cited 1758 as the year of publication (Dryander, 1798:224; Cuvier, 1828:109; Dean, 1917:433; Engel, 1937:93, 99; Engel,

1961:121), others cited 1761 (Cobres, 1782:109; Engelmann, 1846:159; Hagen, 1863:148). There exist copies of this volume with on the title page the indication "Amstelaedami, apud Janssonio-Waesbergios, MDCCLVIII", while others carried the inscription "Amstelaedami, apud H. K. Arksteum & H. Merkmum & Petrum Schouten MDCCLXI". The solution to this problem is given by two notices in "De Nederlandsche Letter-Courant" (Anon., 1759:342, 343; Anon., 1761:263, 264). From these notices it becomes clear that when the publication of the "Thesaurus" was resumed after Seba's death, of the two original publishers only H. Janssonius van Waesberge was left to carry on. After the text had been edited by Vosmaer, Van Waesberge published the book using for it the first of the above title pages, giving his name as that of the sole publisher and dated it 1758. Soon after, probably in 1760, Van Waesberge died and a new delay threatened. But then the two

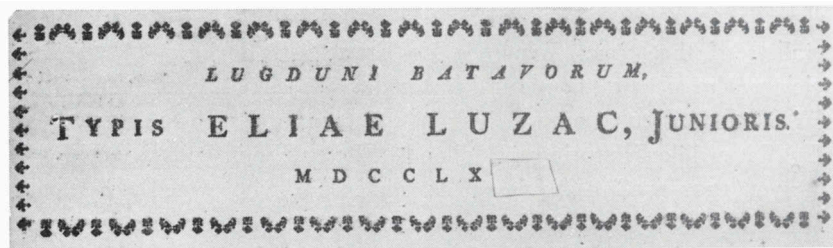


Fig. 1. Inscription at the last page of the table of contents of the third volume of Seba's "Thesaurus", showing the small piece of paper pasted over the last two numbers IX; copy in the library of the Amsterdam Zoological Gardens; photograph L. R. Hafkamp, Zoological Museum Amsterdam

booksellers and publishing firms H. K. Arkstee & H. Merkmum and P. Schouten took over. They bought the entire stock of the "Thesaurus" from Van Waesberghe's heirs and also the copies that were still left with Seba's heirs. They then evidently reissued volume III with a new title page of their own, dated 1761. The whole matter is complicated by the fact that at the last page of the table of contents of volume III is printed: "Lugduni Batavorum, Typis Eliae Luzac, Junioris. MDCCLXIX". In the copy of the library of the Amsterdam Zoo, as Mr. P. Tuyn kindly informed me, a small piece of paper is pasted over the last two numbers so that the year reads MDCCLX (this is also indicated by Engel, 1937:99) (see fig. 1). This would seem to indicate that the volume was published either in 1769 or 1760. Authoritative and contemporary information on the actual date of publication is provided by the earlier of the two above quoted items in "De Nederlandsche Letter-Courant", namely the announcement (Anon., 1759) of the publication of

volume III of the "Thesaurus", which appeared in no. 95 (dated 27 November 1759) of vol. 2 of the "Courant". This information is the more authoritative as "De Nederlandsche Letter-Courant" was published "te Leiden, by Elias Luzac junior", thus by the printers of volume III of the "Thesaurus", who therefore must have had all inside information. The announcement of volume III of the "Thesaurus" in the "Letter-Courant" (Anon., 1759:343) ends with a most important sentence: "Op den Tytel is in plaats van 1759., vermoedelijk door misverstand of abuis, het jaartal 1758 gesteld" (on the title page the year 1758 is printed instead of 1759, probably by mistake or through a misunderstanding). We confidently may therefore accept 1759 as the year of publication of volume III of the "Thesaurus"; this volume being re-issued with a new title page in 1761. The date 1769 at the end of the table of contents evidently is an error for 1759 and the little piece of white paper has been pasted by mistake over the last IX instead of over the one but last X.

Volume III contains the figures and descriptions of the Fishes, Mollusca, Echinodermata, Crustacea, Coelenterates, Vermes, Bryozoa, Sponges and Algae. Originally the minerals and fossils also were intended for this volume, but Vosmaer decided for reasons of convenience to place those in the fourth volume: "door de veelheid der Platen die reeds in dit werk komen, heeft . . . hy zich genoodzaakt gevonden. . . , om 'er eenige, betreffende de *Mineraalen*, steenen en in steenveranderde lichchaamen in het 4e. en laatste Deel over te brengen" (Anon., 1759:342). The objects are arranged more systematically than in the first two volumes. The text is mediocre, although that concerning the fishes (partly or entirely by the hand of Peter Artedi) is superior to the rest, as already remarked by Cuvier (1828:109): "Le texte du troisième volume contient sur les poissons de très-bons articles d'Artedi, qui se distinguent avantageusement du reste de l'ouvrage".

Volume IV. — This volume was published in 1765 by H. K. Arkstee & H. Merkus and P. Schouten, the two firms that in 1761 took over the publication of the work. In a circular, which is cited in Anon. (1761:264), they indicated that when taking over the project all the copper plates and the text of this volume were finished: „het welk [= de publicatie] zy niet zouden aanvaard hebben, indien zy alle de platen als mede de beschrijving van het vierde en laaste Deel niet klaar gevonden hadden". At that occasion the publishers expressed their hope to have the volume published by the end of 1762 („in het einde van het toekomstige Jaar"), but were evidently too optimistic. Like with volumes I and II there is no difference of opinion about the date of publication of this volume: all sources indicate for it the year 1765.

Arnout Vosmaer edited this volume at the same time as volume III, and his collaborators evidently were the same.

This fourth volume contains the insects, the minerals and the fossils. Like the third volume, it does not show the hodge-podge character of the first two volumes, but the grouping of the objects is far more systematical.

THE "PLANCHES DE SEBA"

All the copper plates of Seba's work were found in 1826 in the possession of the Muséum d'Histoire Naturelle of Paris. It is not known with certainty how they got there, but the most likely hypothesis is that through the mediation of Vosmaer these plates became incorporated in the "cabinet of natural and other valuables" of Prince Willem V of Orange, Stadholder of the Netherlands. When the French revolutionary troops invaded and occupied the Netherlands in 1795 and the Prince of Orange fled to England, the possessions of the Prince were confiscated by the French. His cabinet and menagerie were sent to Paris in 1797 and donated to the Muséum d'Histoire naturelle. After Napoleon's downfall, part of the collections of the Stadholder were retrieved, but part stayed in Paris. It is likely that the Seba plates were among the latter. When Félix Édouard Guérin-Méneville (1799-1874, a most enterprising and energetic zoologist, who wrote numerous papers, largely on entomological subjects, and was the editor of several large works and serials) found these copper plates, he conceived the idea to publish them again and replace the poor original text by an entirely new text, for which he sought the cooperation of several prominent French zoologists. The Paris Museum willingly gave Guérin permission to use the plates and in 1826 (probably in May) the following "Prospectus" was published in de Férussac's *Bulletin des Sciences naturelles et de Géologie* (Anon., 1826: 29-31):

"L'étude de l'histoire naturelle réclame sans cesse le secours des figures dont elle ne peut se passer, pour constater l'identité des espèces, et y renvoyer dans les descriptions qui composent les travaux généraux; mais la plupart des ouvrages publiés ainsi à grands frais, rares dans les bibliothèques, sont hors de la portée de la plupart des naturalistes, qui ne peuvent se les procurer dans les ventes, où leur prix s'élève le plus souvent très-haut. Tel est l'ouvrage si célèbre de Seba, ouvrage indispensable à tous les naturalistes indistinctement, et remarquable par la beauté et par le grand nombre de planches qu'il renferme, tandis que le texte, rempli d'erreurs, vieilli [p. 30:] par le temps et en tout fort insignifiant, ne jouit d'aucune autorité. Par un de ces hasards, qu'on peut appeler une bonne fortune pour tous ceux qui s'occupent de zoologie et même de botanique, les cuivres de Seba se trouvent

en la possession du Muséum royal d'Histoire naturelle de Paris. Cette administration, qui ne laisse échapper aucune occasion de rendre service aux sciences, qu'elle protège si efficacement, a bien voulu permettre à M. Guérin de faire tirer un certain nombre d'exemplaires de ces planches remarquables. Nous avons pensé que les naturalistes de tous les pays accueilleraient avec le plus vif empressement la souscription que nous leur proposons pour la publication de ces planches, auxquelles on joindra un texte de format in-folio, comprenant trois tables explicatives, par ordre de matières, systématique et analytique, mis au niveau des connaissances actuelles, et que veulent bien rédiger plusieurs savans naturalistes de Paris; il suffit de citer les noms, bien connus dans la science, des personnes qui se sont chargées de ce travail, pour offrir au public une garantie suffisante sur son exactitude; se sont:

Pour les Mammifères, M. J. Geoffroy-Saint-Hilaire. — Pour les Oiseaux, les Reptiles et les Poissons, M. Lesson. — Pour les Mollusques et les Annelides, M. le baron de Férussac. — Pour les Crustacés, les Arachnides et les Insectes, MM. Guérin, Audouin et Bois-Duval. — Pour les Echinodermes, les Intestinaux et les Acalèphes, M. Desmarest. — Pour les Polypiers, M. Desnoyers. — M. Guillemin s'est chargé de la Botanique.

Cette édition sera dirigée par M. Guérin, l'un des rédacteurs du *Dictionnaire classique d'Histoire naturelle de l'Encyclopédie méthodique*, auteur de plusieurs Mémoires d'Histoire naturelle, etc.

(*Conditions de la souscription.*) Les planches de Seba paraîtront en 22 livraisons, de 25 planches in-folio chacune, et d'une feuille ou 2 de texte, formant 4 vol., afin de se conformer à la division de l'ancienne édition. Les planches seront tirées sur grand papier jésus, le texte sera imprimé sur beau papier d'Annonay, et avec les caractères de F. Didot. Prix de chaque livraison, 10 fr. pour Paris, 12 fr. pour les départemens, et 14 fr. pour l'étranger. Il en sera tiré 50 exemplaires, figures coloriées, dont le prix sera déterminé lors de la mise [p. 13:] en vente de chaque livraison. Il paraîtra au moins une livraison par mois, la première en juillet.

On souscrit à Paris (en payant une livraison d'avance), chez Avril de Gastel."

In August 1827 the first three livraisons were published (Anon., 1827: 364). The work was then said to be "rédigé par une réunion de savans, MM. le baron Cuvier, Desmarest, J. Geoffroy-Saint Hilaire, Audouin, Bois-Duval, Guillemin, Valenciennes, baron de Férussac, Lesson, Guérin, Eudes Deslongchamps" and published "sous les auspices de MM. les professeurs et administrateurs du Museum royal d'histoire naturelle de Paris, par les soins de M. E. Guérin". Instead of 22 livraisons of 25 plates, 45 livraisons of 10

plates each were announced, two published each month, and each costing 4 francs. Also the division of the work is different: "*Mammifères* M. J. Geoffroy de Saint-Hilaire; *Oiseaux*, M. Lesson; *Reptiles*, M. Valenciennes; *Mollusques et Annelides*, M. de Férussac; *Crustacés*, M. Audouin; *Arachnides, insectes*, M. Guérin; *Echinodermes, intestinaux*, M. Desmarest; *Polyptiers*, M. Eudes Deslongchamps". The first three livraisons contained no text, but the plates included in them "offrent quelques Zoophytes, les Céphalopodes, toute la série des Astéries et des Oursins, les crustacés et les poissons". This means that these first 3 livraisons probably contained the first 34 plates of volume III.

The publication of livraisons 4 to 12 is announced in Anon. (June 1828: 204). They contain "la suite des coquilles et quelques zoophytes". In the next announcement it is said that livraisons 1 to 12 contain all the plates of volume III, so that livraison 4 to 12 must have contained pls. 35-116.

In the November issue of 1828 of De Férussac's Bulletin (Anon., November 1828:284), the publication of livraisons 13 to 21 is mentioned. They contain the larger part of the plates of volume I. Also the first (and only) text is published now, viz., two sheets of text (8 pages), contained in livraison 13 and dealing with pls. 1 to 48 of volume III.

Finally the publication of livraisons 22 to 45 is announced in June 1831 (Anon., 1831:333): "Après une longue interruption que les événemens ont pu légitimer, nous avons la satisfaction de voir la fin de cette utile entreprise". These livraisons contain all the plates of volumes II and IV and the last of volume I.

In this 1831 announcement it is said that no text other than the two sheets published in 1828 has appeared, but "que tout est sous presse et ne tardera pas à être publié". This last forecast was too optimistic as no more text has been published at all. Neither have title pages been issued. The eight pages of text issued in 1828 have as their title "Planches de Seba (Locupletissimi rerum naturalium thesauri accurata descriptio). Explication des planches du tome III". The text starts with a very short summary of Seba's observations on the medusae, after which the explanation of plates 1 to 48 follows (pl. 3). Of each figure first the name used by Seba is given, followed (where identification is possible) by the then current latin name. After this, in some cases, remarks and observations are provided by Guérin. This text is not only "empruntant au texte de Seba le petit nombre d'observations qui pouvaient offrir de l'intérêt" (Anon., Nov. 1828:284), but often also adds new information on the species in question. In the beginning (viz., in the explanations of pls. 1 to 9) these observations are rather numerous and often occupy several lines, after that (pls. 10-15) they become rather shorter and

fewer. In the text dealing with pls. 16 to 21 some observations are rather long and one even contains the description of the new species *Pholas sebaiana* (on p. 4 in the explanation of pl. 16 fig. 5d). Of plates 22 to 48 the observations are very meagre or altogether absent, nothing but the old and new names then being given.

As to the new species described here, Sherborn (1930:5838) cited this with as author Rang: "**sebaiana** Pholas, Rang, Planches de Seba (5) 1827, 4". Evidently he was led astray by a footnote attached to the text of plate 1, on p. 1 of the "Explication des planches du Tome III". This footnote says namely: "C'est à M. Rang . . . que nous devons les observations précédentes sur les espèces d'Acalèphes représentés dans cette planche". This footnote is signed by Guérin. Clearly Rang is only responsible for the remarks on the medusae of plate 1, Guérin being the author of the rest of the explanations (if he were not, he undoubtedly would also have quoted the other authorities like he did with Rang). The correct citation of the new species thus is: *Pholas sebaiana* Guérin, 1828, Planches de Seba, 3 (livr. 13):4.

Summarizing we can give the following dates of publication of Seba's work:

Locupletissimi Rerum Naturalium Thesauri

vol. I	1734
vol. II	1735
vol. III (original edition)	1759
vol. III (title reprint edition)	1761
vol. IV	1765

These dates are for both the Latin/French and the Latin/Dutch editions.

Planches de Seba

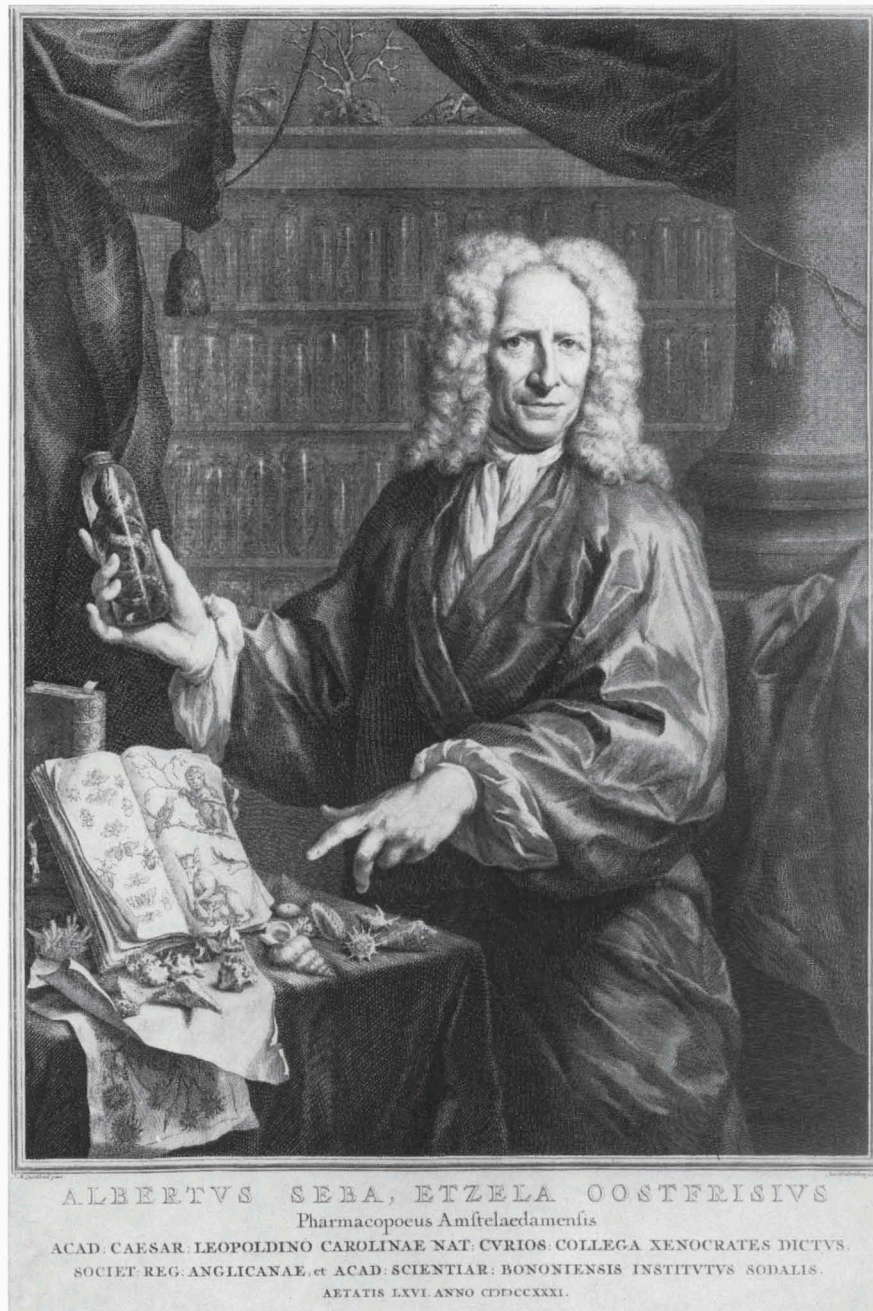
vol. 1, most plates	November 1828
last few plates	June 1831
vol. 2, all plates	June 1831
vol. 3, plates 1-34	August 1827
plates 35-116	June 1828
text, pp. 1-8	November 1828
vol. 4, all plates	June 1831

These dates are those on which the various parts were announced in De Férussac's Bulletin and the actual date of publication may have been slightly, but not much, earlier.

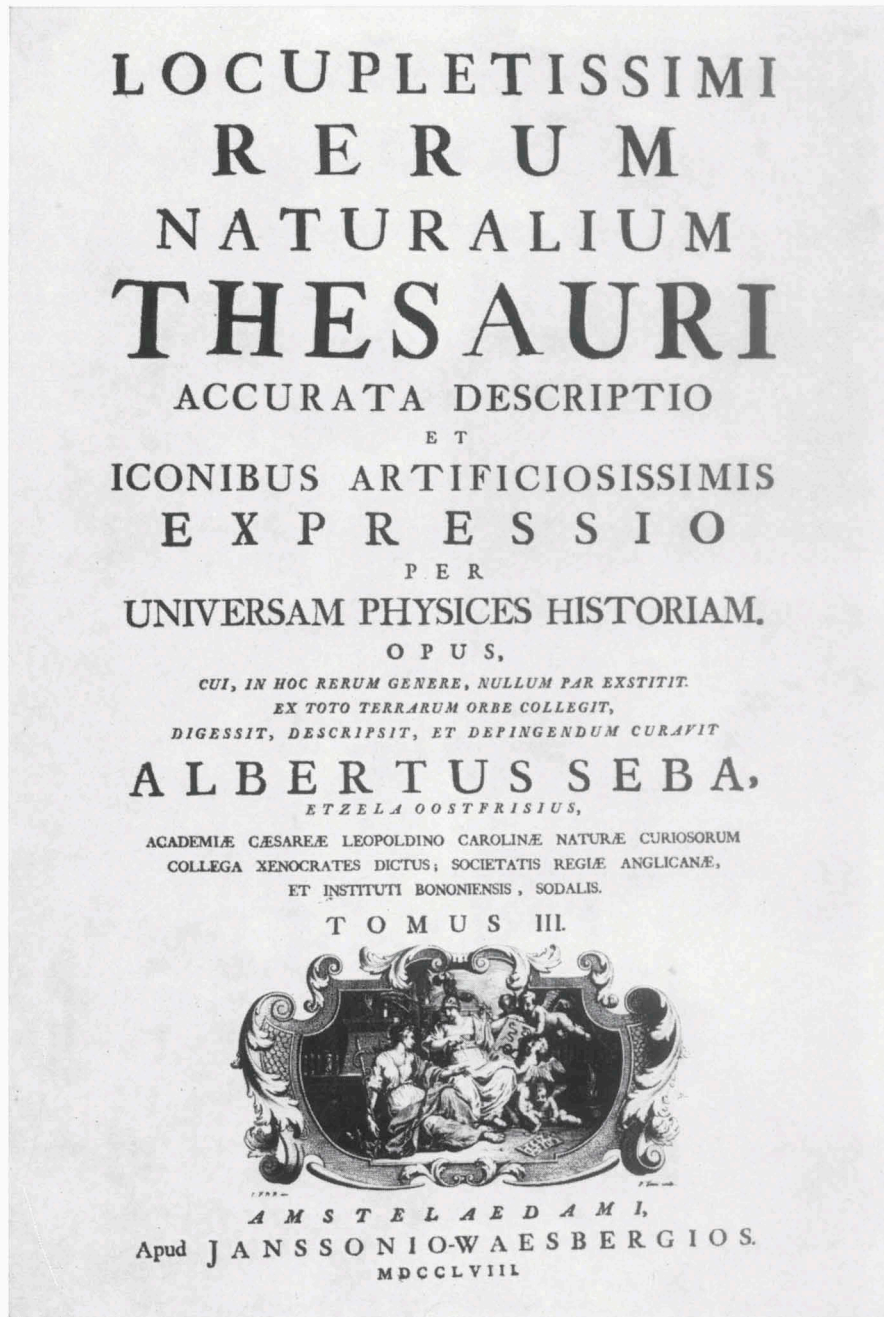
REFERENCES

- ANON., 27 November 1759. [Announcement of the publication of volume III of Seba's "Thesaurus"]. — De Nederlandsche Letter-Courant, 2 (95): 342, 343.
 —, 21 April 1761. [New publishers for Seba's Thesaurus]. — De Nederlandsche Letter-Courant, 5: 263, 264.

- , May 1826. [Prospectus of "Planches de Seba"]. — Férussac's Bull. Sci. nat. Géol., 8: 29.
- , August 1827. [Announcement of livraisons 1-3 of "Planches de Seba"]. — Férussac's Bull. Sci. nat. Géol., 12: 364.
- , June 1828. [Announcement of livraisons 4-12 of "Planches de Seba"]. — Férussac's Bull. Sci. nat. Géol., 14: 204.
- , November 1828. [Announcement of livraisons 13-21 of "Planches de Seba"]. — Férussac's Bull. Sci. nat. Géol., 15: 284.
- , June 1831. [Announcement of livraisons 22-45 of "Planches de Seba"]. — Férussac's Bull. Sci. nat. Géol., 25: 333.
- COBRES, J. P. VON, 1781-1782. *Deliciae Cobresianae*. I. P. v. Cobres Büchersammlung zur Naturgeschichte: i-xxviii, 1-956.
- CUVIER, G., 1828. In: G. Cuvier & A. Valenciennes, *Histoire naturelle des Poissons*, 1: i-xvi, 1-573.
- DEAN, B., 1917. A bibliography of fishes, 2: 1-702.
- DRYANDER, J., 1798. *Catalogus bibliothecae historico-naturalis Josephi Banks*, 1: i-vii, 1-309, i-xiv.
- EKAMA, C., 1885-1888. Fondation Teyler, *Catalogue de la Bibliothèque*, 1: i-vii, 1-827.
- ENGL, H., 1937. The life of Albert Seba. — *Svenska Linné-Sällskapets Årsskr.*, 20: 75-100, 6 figs.
- , 1951. Some Artedi documents in the Amsterdam archives. — *Svenska Linné-Sällskapets Årsskr.*, 33-34: 51-66, figs. 1-5.
- , 1961. The sale-catalogue of the cabinets of natural history of Albertus Seba (1752). A curious document from the period of the naturae curiosi. — *Bull. Res. Council Israel*, (B) 10B: 119-131, figs. 1-5.
- ENGELMANN, W., 1846. *Bibliotheca historico-naturalis*. Verzeichniss der Bücher über Naturgeschichte welche in Deutschland, Scandinavien, Holland, England, Frankreich, Italien und Spanien in den Jahren 1700-1846 erschienen sind, 1: i-vii, 1-786.
- HAGEN, H. A., 1863. *Bibliotheca entomologica*. Die Litteratur über das ganze Gebiet der Entomologie bis zum Jahre 1862, 2: 1-512.
- HOLTHUIS, L. B., 1959. Notes on pre-linnean carcinology (including the study of Xiphosura) of the Malay Archipelago. In: H. C. de Wit, *Rumphius Memorial Volume*: 63-125: pls. 7-11.
- MERRIMAN, D., 1941. A rare manuscript adding to our knowledge of the work of Peter Artedi. — *Copeia*, 1941: 65-69, pls. 1, 2.
- PALLAS, P. S., 1767. *Spicilegia zoologica quibus novae imprimis et obscurae animalium species iconibus, descriptionibus atque commentariis illustrantur* (1): 4 pp, 1-44, pls 1-3.
- SHERBORN, C. D., 1930. *Index Animalium sive index nominum quae ab A.D. MDCCLVIII generibus et speciebus animalium imposita sunt*, 2 (23): 5703-5910.
- WOODWARD, B. B., 1913. *Catalogue of the books, manuscripts, maps and drawings in the British Museum (Natural History)*, 4: 1 p., 1495-1956.



Albertus Seba (1665-1736), 66 years old (from Seba's "Thesaurus"; photograph L. R. Hafkamp, Zoological Museum, Amsterdam).



The 1758 latin titlepage of the third volume of Seba's "Thesaurus" (photograph L. R. Hafkamp, Zoological Museum, Amsterdam).

PLANCHES DE SEBA

(LOCUPLETISSIMI RERUM NATURALIUM THESAURI ACCURATA DESCRIPTIO).

EXPLICATION DES PLANCHES DU TOME III.

Observations. Seba commence son troisième volume par les Zoophytes, connus, dit-il, des Hollandais sous le nom de Zeequallen. Les Italiens les appellent Flammis de mer, parce qu'en été, lorsque l'eau de la mer se trouve échauffée par la chaleur du soleil, ils flottent sur sa surface, et jettent, au milieu des ténèbres, une lumière semblable à celle du phosphore. Il est probable, dit Seba, que chacun de ces animaux produit son semblable par la génération. Les marins, ajoute-t-il, prétendent que c'est un signe d'orage, lorsqu'on voit beaucoup d'Holothuries flotter à la surface des eaux. Le reste des observations de Seba sur les Zoophytes est emprunté aux anciens.

PLANCHE I.

- N° 1. Fungus marinus, pileolo lato, orbiculari, caudicibus, Seb.
N° 2. Alnus, forma diversa, Seb.
N° 3. Alnus, recurvus, Seb.
N° 4. Alnus, n° 2 similis, plantis, aequali, radiatis, Seb.
N° 5, n° 2 similis, convezso rotundato, Seb.
N° 6, n° 2 similis, contractis, Seb.
N° 7, n° 2 similis, prure etiam magis contractis, Seb.

Ces deux figures sont des Acalypthes fixes, voisins des Actinies, mais qui s'en distinguent par l'absence de tentacules. Peut-être ce zoophyte doit-il former un genre à part.

N° 8 et 9. Monstrum marinum singulare, Seb., sans indication de localité — Aphysia depilans, Linné? vue en dessus et en dessous.
Seba décrit grossièrement l'animal et sa coquille; il mentionne les dents de la bouche du premier. Ses figures et sa description ne permettent pas de déterminer cette espèce avec certitude.

N° 10. Mentula marina sive Epipetrum, prima species, Seb.; Holothuribus ou Verges marines.
N° 11. Idem, secunda species, Seb.
N° 12. Idem, tertia species, Seb.

Ces trois figures appartiennent à n'en pas douter, à la classe des schizothèques; ils paraissent se rapporter au genre Siphonelle, mais leurs caractères ne sont pas assez marqués pour rendre leur détermination possible. [1]

N° 13. Tethyurum species prima, Seb. — Chiton punctatus, Linn.

Liné a rapporté cette figure à son Chiton punctatus dans ses Anim. acad., et dans la X. édition de Syst. nat.; mais il est vraisemblable qu'il faut retrancher des autres synonymes qu'il rapporte à cette espèce, les citations d'Obserck et des Ephémérides du carême de la même année, y a été insérée par Muller (Zool. dan. Prod.), avec tout aussi peu de fondement. Cette espèce est encore fort incertaine, et on ne peut en reconnaître d'autres.

N° 14. Tethyurum altera species, Seb. — Chiton magellanicus, Gmelin.

Liné avait d'abord rapporté cette figure à son Chiton subrotundus (Syst. nat. X, p. 1106); mais Gmelin l'a retiré avec raison, et l'a rapporté sans motif à son Chiton magellanicus, dont le type est l'espèce de ce nom dans Klunmeyer, quoique la citation en soit oubliée. Elle n'y rapporte la figure de Seba au Chiton subrotundus de Liné sans raison probable. Selon toutes les apparences, l'espèce de Seba est distincte de ses diverses espèces, et devra, si elle n'est reconnue, recevoir un autre nom.

N° 15 et 16. Tethyurum tertia species, supra et infra conspicua, Seb. — Plectylidia trilobata, Lam. (Ann. Mus. N° 2211, 1), vue en dessus et en dessous. Var. a, Férussac.

Par inadvertance, la figure 15 est dans Seba, p. 4, rapportée à l'espèce précédente, erreur adoptée par plusieurs auteurs. L'explication des planches leue tous les doutes à ce sujet, ainsi que la vue même de cette figure.

La partie supérieure de cette espèce, dit Seba, est d'un bel blanc, et marquée de tubercules d'un bleu clair, que l'on prendrait pour des perles de différents grosseurs, et qui tiennent les uns aux autres ou d'eux isolés.

Ce peu de mots de Seba suffit pour reconnaître une variété bien distincte dans l'individu qu'il décrit, par la couleur des tubercules, jumeau dans les exemplaires observés par M. Cuvier, ainsi que dans la figure de MM. Quoy et Gayard.

[1] C'est à M. Raug, officier de marine, qui cultive avec succès l'histoire naturelle des Acalypthes et des Holothuries, que nous devons les observations précédentes sur les espèces d'Acalypthes représentées dans cette planche. GÉNÉRAL.

PLANCHE II.

- N° 1. Polypus mar, Seb.; Polype d'Amérique, marin. — Octopus vulgaris? Lam., Férussac.
N° 2. Priopi similis, minor, subius conspicuus, Seb. — Octopus granulatus, Lam., Férussac, var. β, vu en devant.
N° 3. Alnus, minor, supra conspicendus, Seb. — Octopus granulatus plus petit, vu par derrière.

N° 4. Polypus fenius, major, prona, Seb. — Eledone cirrhosa, Férussac; Octopus cirrhosus, Lam.

N° 5. Femella altera, minor, supina, Seb. — Octopus vulgaris.

N° 6. Juvenula alia, minor, corpore glabro, Seb. — Eledone muschata, Leach, Férussac; Octopus muscatus, Lam.

N° 7. Alia similis, corpore oblongo, Seb. — Octopus vulgaris.

Neuvième figure dans le genre de celles de Cuvier, d'Albravande, fig. 15, et de Janson, tab. X, fig. 1, ou l'on a mis les cupules sur la face extérieure des bras?

N° 8. Œufs de l'Octopus vulgaris. Les uns fécondés, les autres stériles, dit Seba; les autres sont seuls et sans fécondés.

PLANCHE III.

N° 1 et 2. Sepia naus, et maximis speribus, Seb. — Sepia officinalis, Linn.; Très-grand individu, vu en dessus et en dessous.

Les Hollandais appellent les sèches Chais de mer, nom qui ne leur convient guère, dit Seba. Les œufs sont d'abord jaunâtres, semblables à des pois, et pointus en avant. A mesure qu'ils croissent, ils acquièrent une couleur noire, et forment comme une espèce de gouppe. C'est peut-être alors que les mâles versent dessus leur liquide fécondant. Jusqu'à ce que cette fécondation se fasse, ces petits œufs restent d'un jaune clair, ils ont une forme renflée dans le blanc, qui est lui-même recouvert d'une membrane assez épaisse. Quatre jours après la fécondation, les petits sortent. Le mâle et la femelle ont grand soin de bien garder ces œufs jusqu'à ce qu'ils colorent, et lorsque les petits en sont sortis, ils les lâchent contre tous ceux qui voudraient leur nuire.

N° 3 et 4. Sepia junior, supina et prona, Seb. — Sepia officinalis, dessus et dessous, jeune individu.

N° 5 et 6. Sepia minor (Loligo), Seb. — Loligo sagittata, Lam.; Férussac, var. β; très-jeune individu, vu en dessus et en dessous.

N° 7 et 8. Œufs de la Sepia officinalis, les uns avant (fig. 7), les autres après (fig. 8) la fécondation.

Ces œufs sont connus sous le nom de Bains de mer. N° 9 et 10. Ossa sepiarum, majus et minus, Seb. — Rudimens testacés internes de la Sepia officinalis, vulgairement appelés Os de sèche, grand et petit; vu en dessus, 10 vu en dessous.

PLANCHE IV.

N° 1. Loliginis species maxima, Seb. — Loligo sagittata, Lam.; Férussac, var. a.

Trois gros individus du Brésil, ou on l'a pris sur le rivage. Selon Seba, cette espèce se trouve aussi sur les côtes de France et d'Italie. En effet, elle se trouve assez communément dans la Méditerranée.

N° 2. Loliginis altera species, Seb. — Loligo sagittata, Lam., Férussac, var. a.

Selon Seba, ce sont un autre espèce; il dit que ses bras sont plus courts proportionnellement, que les bras pédonculés sont plus courts et plus ronds, et qu'il n'y a que l'extrémité de ceux-ci qui soit garnie

de ventouses, que le cou est plus long et les yeux plus petits. En effet, la figure ne représente des cupules sur les longs bras que jusqu'à la moitié environ de leur longueur; tandis que, dans la figure précédente, les cupules s'étendent jusqu'à l'extrémité. La taille, l'aspect général est le même. Avec une Calmar comme n'offre des cupules sur une si grande étendue, excepté le septième, les longs bras présentent d'ailleurs de caractères communs d'être dépourvus de masses proprement dites. Nous croyons donc devoir suivre le sentiment de M. de Lamarck, en considérant cette figure comme appartenant aussi au sagittata, du moins jusqu'à ce que des observations nouvelles viennent confirmer l'existence d'une autre espèce, à laquelle la description et la figure de Seba conviendront mieux. La partie supérieure de son corps est marquée de taches de couleur pourpre, qui se trouvent en plus grand nombre sur le dos, ou tout aussi les plus grandes. La partie inférieure du corps est d'un blanc cendré.

N° 3 et 4. Loliginis tertia et quarta species, Seb. — Loligo sagittata, var. β, Lam., Férussac.

Seba, en distinguant ces deux figures comme appartenant à deux espèces distinctes, a faibli la distinction qu'il établit entre les figures 3 et 4; car la distinction des figures 3 et 4 ne semble pas inutile. Peut-être de nouvelles observations feront-elles se joindre ces deux variétés au sagittata?

N° 5. Bivalvem speciem junior Loligo, Seb. — Même espèce, var. β; très-jeune individu.

N° 6. Œufs du Loligo sagittata, selon Seba.

N° 7 et 8. Eruca marina, prona et supina, Seb. — Halitaea aculeata, Savigny; Aphrodita aculeata, Linn., Cuvier.

PLANCHE V.

N° 1. Stella marina, ad oram maris meridionalis belgici reperta, et n° 2, eadem supina, Seb. — Ophiura . . .

Il se pourrait que cette échinide doit être rapportée à l'Ophiura pentagona de M. de Lamarck (du Zooph. Zool.).

N° 3. Sceletum Stella marinae, Seb. — Asterias rubens. (De nos côtes.)

Figure représentant la disposition des pièces crustacées qui forment le set d'une astérie commune, Asterias rubens de Lamarck.

N° 4. Stella marina, tetractis, falcata, Seb. — Asterias reticulata? Lam.

Ce qui nous engage surtout à rapporter cette figure à l'Asterias reticulata malgré son imperfection, c'est sa forme anormale, tout-à-fait semblable à celle de la planche XXXI, n° 51, de Linn., et qui consiste en quatre branches seulement disposées symétriquement.

N° 5. Stella marina papillosa, et n° 6, eadem supina, Seb. — Asterias . . .

Cette astérie a de la ressemblance avec l'Asterias nodosa; mais sous la croyance d'une espèce différente, parce que les tubercules du milieu de ses branches en dessous ne sont pas plus gros que les autres, et ont une forme arrondie, et que les coelètes de la face inférieure sont très-peu.

N° 7 et 8. Stella marina, pentactera, tuberculosa, Seb. — Asterias nodosa, Gmel.

M. de Lamarck ne place pas l'indication de cette figure au nombre des synonymes de son Asterias nodosa, et il est vraisemblable qu'elle se rapporte à une espèce différente, si l'on en juge du moins par la forme des tubercules du milieu, qui portent chacun une petite pointe.

N° 9 et 10. Astropetrum regularis, minor, italicus, Seb. — Asterias . . .

Cette espèce semble, du moins par les caractères peu accésés que montre sa figure, se rapprocher de l'Asterias varicata. Comme celle-ci, elle se trouve dans la Méditerranée sur les côtes d'Italie.

N° 11 et 12. Astropetrum regularis, minor, nostras, margaritifera, Seb. — Asterias . . .

Celle-ci pourrait être considérée comme un jeune individu de l'Asterias, figure n° 9 et 10 de cette planche; mais les rayons n'ont pas de gouttière en dessous.

N° 13, 14 et 15. Stellula marina, minutissima, americana, in Museo marino inventa, Seb. —

The first page of the text of "Planches de Seba". (photograph C. Hoorn, Rijksmuseum van Natuurlijke Historie, Leiden).