

## H. NORDSIECK's Publications (1962-2020) - Abstracts

### (1962): Die Chondrinen der Südalpen. — Archiv für Molluskenkunde, 91 (1/2): 1-20.

Das Genus *Chondrina* REICHENBACH 1828 (Chondrinida, Vertiginacea) entwickelt in den Südalpen ähnlich wie in den Pyrenäen eine Fülle von Formen, deren systematische Ordnung bis jetzt nicht hinreichend bekannt ist. Die beiden, auch in den nördlichen Kalkalpen und Teilen Deutschlands verbreiteten Arten *avenacea* und *clienta*, die von EHRMANN (1931) ausreichend charakterisiert wurden, besiedeln die südlichen Kalkalpen nur in Teilgebieten. Das hier behandelte Gebiet umfaßt die Ketten der südlichen Kalkalpen vom Lago Maggiore im Westen bis Kärnten, Slowenien und dem kroatischen Karst im Osten. Der Westen des genannten Gebiets wird in niedrigen Lagen fast ausschließlich von der größten südalpinen Art, *megacheilos*, besiedelt, die in höhern Lagen vieler Täler von *multidentata* abgelöst wird (so z. B. in den Tälern Valsassina, Valbrembana, Valle Seriana, Valle di Scalve, Vallarsa, Valle d'Illasi, u. a.). *Ch. megacheilos* muß als ausgesprochen wärmeliebende Art der westlichen Südalpentäler im Bereich der großen italienischen Seen bezeichnet werden. Ihr Verbreitungsgebiet, in dem sie zwei große geographische Rassen ausbildet, reicht von der Provence bis ins Veronesische. Die zweite genannte Art, *multidentata*, ist dagegen eine mehr montane Form, die oft in größeren Höhen und in den oberen Teilen der Täler lebt und verwandtschaftlich stark zur *avenacea* neigt, von der sie jedoch durch eine Anzahl eigentümlicher Merkmale abweicht. Ihr Verbreitungsgebiet reicht vom Come See im Westen über die höheren Teile der Bergamasker Alpen durch Dolomiten und Venetianer Alpen bis zu den Julischen Alpen des Kanaltals im Osten. F. SCHROTT (1935) hat ihr eine eingehende Arbeit gewidmet. Ein merkwürdiger Endemismus der Bergamasker Alpen ist *Ch. bergomensis*, die bis jetzt nur aus der Gegend um Bergamo bekannt ist und dort in niedrigen Lagen die *megacheilos* ersetzt. Neben den genannten Arten treten nun die bekannten Arten, *avenacea* und *clienta*, auf. Die erstere ist in den höheren Lagen der mittleren und östlichen Südalpen von Südtirol bis Kärnten und Krain verbreitet und bildet mehrere geographische Rassen aus. Die zweite, kontinentale Art, *clienta*, besiedelt den ganzen Osten und dringt im Westen bis Osttirol und zum Kanaltal vor. Sie ist im Gebiet recht einheitlich ausgebildet und läßt keine Rassierung erkennen.

### (1963a): Zur Anatomie und Systematik der Clausiliien, I. — Archiv für Molluskenkunde, 92 (3/4): 81-115.

Im ersten Teil dieser Arbeit wird der Bau des Genitalsystems der Clausiliidae und dessen taxonomisch bedeutsamen Merkmale dargestellt. Diese finden sich in den weiblichen und männlichen Kopulationsorganen und der Muskulatur. Bei den Clausiliinae wird aus dem Bau der männlichen Kopulationsorgane verschiedener Gruppen deren Phylogene rekonstruiert. Dabei wird der Begriff des Pseudoepiphallus eingeführt. Anschließend wird ein auf Genitalmorphologie gegründetes System der Clausiliidae vorgeschlagen. Die taxonomische Bedeutung der als Graciliaria-Typus bezeichneten Ausbildung des Verschlußapparats wird diskutiert.

Im zweiten Teil der Arbeit werden die Genitalsysteme von bisher noch nicht genitalmorphologisch untersuchten Arten der Gattungen *Delima*, *Cochlodina*, *Ruthenica*, *Iphigena*, *Clausilia* und *Laciniaria* beschrieben und abgebildet. Diese Gattungen werden den Unterfamilien Cochlodininae und Clausiliinae zugeordnet; die Unterfamilie Clausiliinae wird in die Triben Fusuleae, Clausilieae und Laciniarieae gegliedert.

### (1963b): Zur Anatomie und Systematik der Clausiliien, II. Die Formenbildung des Genus *Delima* in den Südalpen. — Archiv für Molluskenkunde, 92 (5/6): 169-203.

Das Ziel dieser Arbeit war, den südalpinen *Delima*-Bestand taxonomisch zu gliedern. Es wurden nur die in taxonomisch bedeutsamen Merkmalen verschiedenen geographischen Rassen als Unterarten benannt. Die Einheiten, die nicht den Rang einer geographischen Rasse erreichen (geographische Formen), wurden zwar beschrieben, aber nicht benannt.

In den Südalpen finden sich folgende Taxa:

*Delima itala* (G. MARTENS) im westlichen und mittleren Bereich, mit mehreren Unterarten;

*D. ornata* (ROSSMÄSSLER) in den Südostalpen;

eine Reihe von Formen vom Comer See bis zum Isonzo, die nicht einer Art *D. stenzii* (ROSSMÄSSLER) angehören, weil sie der *D. itala* unterschiedlich ähnlich sind:

*D. stenzii* im mittleren und östlichen Bereich, mit mehreren Unterarten;

die der *D. itala* als stenioide Rassen zugeordneten Taxa des westlichen Bereichs.

Die Untersuchung des Genitalsystems bestätigte die auf gehäusemorphologische Merkmale begründete Gliederung.

**(1966a): Zur Anatomie und Systematik der Clausilien, III. *Clausilia whateliana* und ihre Beziehungen zu den übrigen *Clausilia*-Arten, besonders zum Subgenus *Neostyriaca*. — Archiv für Molluskenkunde, 95 (1/2): 19-47.**

Die südalpine *Clausilia*-Art *Clausilia whateliana* ist in fünf Rassen zu gliedern, die gut unterschieden sind, so daß bisher (bis auf eine Ausnahme) keine Übergangsformen gefunden wurden: vom W des Verbreitungsgebiets nach O *brembina*, *whateliana*, *exoptata*, *klemmi* n. subsp. und *umbrosa*. Die Rassen werden gehäuse- und genitalmorphologisch beschrieben und ihre verwandtschaftlichen Beziehungen dargestellt (vgl. Abb. 1). Die Verbreitung der Rassen und ihre Beziehungen im Raum stützen die auf morphologischem Wege gewonnenen Resultate.

Des weiteren werden die Beziehungen von *Clausilia whateliana* zu den übrigen *Clausilia*-Arten, besonders zu denen des Subgenus *Neostyriaca* (*corynodes* und *strobeli*), erörtert. Für die vergleichende Betrachtung des Genitalsystems erwies sich eine erneute genaue Untersuchung der männlichen Endwege der Unterfamilie *Clausiliinae* als erforderlich, wobei der Begriff des Parepiphalus neu eingeführt wurde.

**(1966b): Grundzüge zur vergleichenden Morphologie des Genitalsystems der Schnecken, unter besonderer Berücksichtigung der Stylommatophora. — Archiv für Molluskenkunde, 95 (3/4): 123-142.**

Im ersten Teil der Arbeit werden die Grundzüge des Baues der Gonade und des Gonodukts der Schnecken erörtert und gleichzeitig die verschiedenen Teile des Gonodukts definiert, wobei die homologen Abschnitte von männlichem und weiblichem Gonodukt einander zugeordnet werden. Anschließend wird eine Homologisierung des Gonodukts der Zwitter mit dem männlichen bzw. weiblichen Gonodukt der getrenntgeschlechtlichen Schnecken durchgeführt, wobei sich eine kombinierte Ausbildung beider Gonodukte im Zwitter ergibt. Gonade und proximaler Gonodukt sind einfach (zwittrig), während im pallialen Teil des Gonodukts eine Aufspaltung in männlichen und weiblichen Gonodukt erscheint.

Im zweiten Teil wird versucht, die Vorgänge in der Phylogene der Schnecken herauszustellen, die grundlegende Änderungen im Bau des Genitalsystems mit sich brachten. Bau und Phylogene des Genitalsystems der Streptoneura werden erörtert, anschließend die Unterschiede zu den Euthyneura zusammengefaßt.

Im dritten Teil wird das Genitalsystem der Euthyneura besprochen, wobei für die Ausbildung des pallialen Gonodukts vier Ausbildungsformen unterschieden werden: monauler, diauler, semi-diauler und triauler pallialer Gonodukt. Als besonders wichtig für die Ableitung des pallialen Gonodukts der Zwitter aus einer Kombination beider Gonodukte der getrenntgeschlechtlichen Schnecken ist die Feststellung anzusehen, daß der Spermovidukt primär eine Dreiteilung in ovipares Lumen, vaginale und spermaausführende Rinne aufweist. Damit ist eine Ableitung vom weiblichen oder männlichen pallialen Gonodukt der getrenntgeschlechtlichen Schnecken allein hinfällig. Für die Verhältnisse der Geschlechtsöffnungen bei den Zwittern werden die Begriffe diatrem (getrennte Geschlechtsöffnungen) und syntrem (zusammengelegte G.) neu eingeführt. Nach Erörterung der entscheidenden Vorgänge bei der Phylogene des Genitalsystems der Euthyneura wird eine Darstellung seines Baues gegeben, die den Grundbauplan aller Euthyneura erfassen soll.

Im vierten Teil bildet eine vergleichende Übersicht über die verschiedenen Gruppen der Euthyneura die Grundlage zu einer Darstellung des Genitalsystems der Stylommatophora im Rahmen der Euthyneura, wobei sich die vergleichende Morphologie wegen der bisher unzureichenden Untersuchungen auf die Ausbildung des pallialen Gonodukts (monaul, diaul, semi-diaul, triaul) und das Auftreten von Kopulationshilfsorganen für wechselseitige Begattung beschränken muß. An die Darstellung des Genitalsystems der Stylommatophora schließt sich eine Besprechung seiner Bedeutung für die Systematik dieser Schnecken an, besonders die der Kopulationsorgane für die Artentstehung (paarungsbiologische Einnischung).

**(1968): Hinweise zur Sammlungs- und Präparationstechnik bei Schnecken am Beispiel der Clausiliidae. — Mitteilungen der deutschen malakozoologischen Gesellschaft, 1 (12): 275-283.**

**(1969a): Zur Anatomie und Systematik der Clausilien, IV. *Cochlodina dubiosa* und ihre Stellung im Genus *Cochlodina*. — Archiv für Molluskenkunde, 99 (1/2): 1-20.**

*Cochlodina dubiosa* wird als selbständige Art neben den sympatrischen Arten *laminata*, *fimbriata* und *costata commutata* beschrieben. Sie erweist sich als nahe verwandt mit *laminata*, während die Ähnlichkeit mit *fimbriata* und *costata commutata* rein äußerlich ist. Die Unterschiede zu *laminata* werden zusammengestellt und, soweit meßbar, statistisch untersucht. Die horizontale und vertikale Verbreitung der Art sowie die Abhängigkeit von Größe und Gestalt der Gehäuse von der Meereshöhe des Standorts werden untersucht. Der Biotop von *dubiosa* und seine Verschiedenheit von dem der *laminata* wird bechrieben, wobei der Häufigkeit des Zusammenlebens mit *laminata* besondere Beachtung geschenkt wird. Als letztes wird die Variabilität der Art in ihrem Verbreitungsgebiet besprochen, wobei im südostalpinen Verbreitungsgebiet keine geographische Rassenbildung festgestellt werden kann, während die Populationen des sudetischen Isolates auf Grund weniger Gehäusemerkmale als Rasse *corcontica* Brabenc 1967 abgetrennt werden können.

**(1969b): Die *Cochlodina*-Arten des westlichen Mittelmeerraumes. — Archiv für Molluskenkunde, 99 (1/2): 21-25.**

Die *Cochlodina*-Formen des westlichen Mittelmeerraumes bilden eine Gruppe innerhalb des Genus *Cochlodina*, *Cochlodina (Procochlodina)* n. subgen., die aus vier Arten besteht, deren Verbreitungsgebiete vollständig voneinander getrennt sind: *bavayana* in Algerien um Bône, *kuesteri* auf Sardinien mit zwei Rassen, *k. kuesteri* in Mittel- und S-Sardinien und *k. sassariensis* n. subsp. in N-Sardinien, *meisneriana* auf Korsika und *incisa* im Westteil Mittel-Italiens.

**(1969c): Zur Anatomie und Systematik der Clausilien, V. Genitalsystem und Systematik des Genus *Cochlodina*. — Archiv für Molluskenkunde, 99 (3/4): 107-132.**

In Teil V der Arbeitenserie zur Anatomie und Systematik der Clausilien werden die Ergebnisse der Untersuchung des Genitalsystems zahlreicher Arten und Rassen des Genus *Cochlodina* (alle Arten mit Ausnahme von *bavayana*, *kuesteri* und *meisneriana*) zusammengestellt, mit ihrer Hilfe die systematische Stellung und Verwandtschaftsverhältnisse der verschiedenen Formen untersucht und eine zusammenfassende Darstellung des Genitalsystems des Genus gegeben.

Die wichtigsten Ergebnisse der Arbeit sind: Zum Genus *Cochlodina* gehören die Arten *laminata*, *dubiosa*, *polita*, *costata*, *cerata*, *transsilvanica*, *orthostoma*, *comensis*, *fimbriata*, *triloba* und *incisa* (dazu die nicht untersuchten Arten des Subgenus *Procochlodina*). Die artliche Trennung von *laminata* und *dubiosa* wird ebenso bestätigt wie die nahe Verwandtschaft der beiden Arten (vgl. Teil IV dieser Serie). *Grossa* und *inaequalis* dagegen sind Rassen der *laminata*; die letztere unterscheidet sich von den übrigen *laminata*-Formen fast so weitgehend wie *dubiosa*. Die *polita* ist eine selbständige Art, die weder mit *laminata* noch mit *costata* oder *triloba* große Übereinstimmung aufweist. Unter dem Artnamen *costata* müssen die Formen zusammengefaßt werden, die früher als *commutata*, *costata* und *curta* unterschieden wurden. Innerhalb der Art *costata* zeigen die istrischen Formen (*curta*, *subcostata*) mehrere Unterschiede gegenüber den übrigen, so daß sie ihnen als verwandtschaftliche Einheit gegenübergestellt werden können. Die *cerata* und *transsilvanica* sind selbständige Arten, wobei *cerata* mehr der *costata* und *transsilvanica* mehr der *orthostoma* ähnelt. Die *triloba* ist ebenfalls eine selbständige Art, die nicht mit *laminata*, sondern mit *fimbriata* nahe verwandt ist. Die *incisa* zeigt keine näheren Beziehungen zu *laminata*, sondern steht durch die Ausbildung einer großen Penispapille und langen Vagina so isoliert, daß die Abtrennung des Subgenus *Procochlodina* (NORDSIECK 1969) auch anatomisch begründet werden kann, vorausgesetzt, die drei verwandten Arten *bavayana*, *kuesteri* und *meisneriana* stimmen in diesen Merkmalen mit ihr überein.

Eine Darstellung der verwandtschaftlichen Beziehungen aller Arten des Genus wird in Abb. 34 versucht. Für die Ausbildung des Genitalsystems der Stammform von *Cochlodina* werden zwei Möglichkeiten in Betracht gezogen, da sich bei den rezenten Arten die als ursprünglich anzusehenden Merkmale langes Divertikel und Penispapille ausschließen: 1) große Penispapille, kurzes Divertikel, wie z. B. *incisa*, 2) zur Einfaltung reduzierte Penispapille, langes Divertikel, wie z. B. *orthostoma* und *transsilvanica*. Die Gruppe *Macedonica-Serbica*, die nach dem Bau des Verschlußapparats der Stammform von *Cochlodina* nahestehen könnte, weist nach den unzureichenden Angaben der Literatur Gemeinsamkeiten mit der Gruppe 2 auf. Vor einer genauen

Untersuchung des Genitalsystems von *Macedonica* und *Serbica* muß die Frage nach der Stammform von *Cochlodina* offen bleiben.

**(1969d): Zur Anatomie und Systematik der Clausiliien, VI. Genitalsystem und Systematik der Clausiliidae, besonders der Unterfamilie Alopiinae. — Archiv für Molluskenkunde, 99 (5/6): 247-265.**

In Teil VI der Arbeitenserie zur Anatomie und Systematik der Clausiliien wird eine Neuordnung der Unterfamilie Alopiinae durchgeführt, die sich auf den Bau des Genitalsystems der mir zur Verfügung stehenden Arten, eine Auswertung der erreichbaren zugehörigen Literatur und die Gehäusemerkmale und geographische Verbreitung der verschiedenen Gruppen stützt. Die Stellung der Unterfamilie Alopiinae innerhalb der Familie Clausiliidae wird untersucht und das System der europäischen Clausiliidae auf den neuesten Stand gebracht.

Folgende Ergebnisse erscheinen mir besonders wichtig:

1. Die europäischen Clausiliidae lassen sich (mit wenigen Ausnahmen) in vier Unterfamilien gliedern: Alopiinae, Mentissoideinae, Clausiliinae, Baleinae. Die Abtrennung der Baleinae von den Clausiliinae wurde notwendig, weil genaue Untersuchung zeigte, daß sie einen anderen Weg der Umbildung der männlichen Endwege eingeschlagen haben als die Clausiliinae, also durch Parallelevolution entstanden sind.

2. Bei den Alopiinae sind Penisappendix und Penispapille homolog, weil sie sich gegenseitig ausschließen, weil es Übergangsformen mit Papille und der zum Appendix gehörenden Form des Retractor penis gibt (mehrere Arten des Genus *Carinigera*) und weil sie bei der Kopulation die gleiche Aufgabe am gleichen Ort haben (Penispapille als in den Penis ausgestülpter Penisappendix).

3. Die Alopiinae lassen sich nach Auftreten von Penisappendix, Penispapille oder dem Fehlen beider und weiteren Eigenschaften in drei Tribus gliedern: Alopiaeae, Delimeae, und Cochlodineae. Die Gattung *Charpentieria* gehört zu den Delimeae und nicht in die Nähe von *Cochlodina*. Die früher als Tribus Papillifereae (BRANDT 1961: 12) zusammengefaßten Gattungen *Papillifera*, *Leucostigma*, *Isabellaria* und *Muticaria* sind trotz des ähnlichen Verschlußapparates (Graciliaria-Typ des Verschlußapparats, Teil I, 1963a: 91-92) nicht näher miteinander verwandt. Während *Papillifera* im Bau des Genitalsystems mit der benachbart lebenden *Siciliaria* und *Isabellaria* mit der benachbart lebenden *Albinaria* übereinstimmt, bilden *Muticaria* und *Leucostigma* eine selbständige Gruppe, deren Genitalsystem dem der benachbart lebenden Formen mit normalem Verschlußapparat ähnelt, die als *Lampedusa* zusammengefaßt werden.

**(1969e): Zur Anatomie und Systematik der Clausiliien, VII. Dinarische Clausiliidae, I: Das Genus *Delima*. — Archiv für Molluskenkunde, 99 (5/6): 267-284.**

Teil VII der Arbeitenserie zur Anatomie und Systematik der Clausiliien stellt eine Zusammenfassung der Arbeitsergebnisse zur Systematik und geographischen Verbreitung des Genus *Delima* (mit Ausnahme von *piceata*) dar, der Beiträge zur Kenntnis einiger wenig bekannter und neuer *Delima*-Formen angefügt sind. Neu beschrieben werden: *D. montenegrina spuzensis* n. subsp., *D. binotata saturella* n. subsp., *D. decipiens boettgeri* n. subsp. (für *Clausilia opaca* O. BOETTGER [non CHARPENTIER]), *D. d. duarensis* n. subsp., *D. pachystoma satricensis* n. subsp., *D. p. nevestensis* n. subsp., *D. p. vicariella* n. subsp., *D. substricta meridionalis* n. subsp. und *D. hiltrudis* n. sp.

**(1970a): Zur Anatomie und Systematik der Clausiliien, VIII. Dinarische Clausiliidae, II: Das Genus *Medora*. — Archiv für Molluskenkunde, 100 (1/2): 23-75, Taf. 1-6.**

Teil VIII der Arbeitenserie zur Anatomie und Systematik der Clausiliien enthält die Ergebnisse einer ausführlichen Untersuchung des Gehäusebaus und der geographischen Verbreitung aller Arten des Genus *Medora* (Alopiinae), die eine taxonomische Neuordnung des Genus erforderlich macht. Zu *Medora* werden die zwölf Arten *agnata*, *dalmatina*, *hiltrudae*, *armata*, *stenostoma*, *equestris*, *italiana*, *albescens*, *proxima*, *almissana*, *lesinensis* und *contracta* mit insgesamt 45 Rassen gestellt. Von jeder Art und Rasse werden Maße, Diagnose mit Abbildung und Verbreitungsangaben gegeben. Die aus dem Gehäusebau erschlossenen Verwandtschaftsverhältnisse im Genus werden in einem Diagramm (Abb. 4) dargestellt. Insgesamt 11 Rassen und 1 Art werden neu beschrieben: *Medora agnata delimaformis*, *dalmatina drasnicensis*, *d. josephinae*,

*d. latecostata*, *d. schuetti*, *d. montenegrina*, *hiltrudae*, *stenostoma klemmi*, *italiana kobelti*, *albescens livnoensis*, *almissana schmidti* und *a. mariae*.

**(1970b): Die *Chondrina*-Arten der dinarischen Länder. — Archiv für Molluskenkunde, 100 (5/6): 243-261.**

Die vorliegende Arbeit zur Formenbildung des Genus *Chondrina* in den dinarischen Ländern (nordwestlicher Teil der Balkan-Halbinsel) schließt sich an die Bearbeitung der Arten der Südalpen (NORDSIECK 1962) an. Ihr sollen entsprechende Arbeiten über die Arten der südlichen Balkan- und der Apenninen-Halbinsel folgen.

Das Ergebnis der Untersuchung von 420 *Chondrina*-Proben aus den dinarischen Ländern lässt sich folgendermaßen zusammenfassen: Das Untersuchungsgebiet wird von den zwei Arten *spelta* und *clienta* besiedelt, während *avenacea* von den Südostapen her den NW des Gebietes erreicht. Von der südostalpinen *a. lepta* ist die Rasse *a. istriana* aus Istrien zu trennen. Die *spelta* ist über den größten Teil des dinarischen Küsten- und angrenzenden Binnenlandes verbreitet und bildet drei Reihen von Rassen: die *spelta*-Reihe (*s. spelta*, *s. ventilatoris*, *s. fuchsi* n. subsp.) des küstennahen Bereichs und die beiden Reihen des Binnenlands, die *anodon*-Reihe (*s. croatica* n. subsp., *s. heterodon* n. subsp., *s. anodon* n. subsp.) und die *serbica*-Reihe (*s. bosnica* n. subsp., *s. sutjeskae* n. subsp., *s. serbica* n. subsp.). Das Verbreitungsgebiet der *clienta*, die im Untersuchungsgebiet nur in der Nominatrassse auftritt, umfasst das gesamte Binnenland von Slowenien bis Binnen-Albanien, Makedonien und Serbien. Die beiden Arten *clienta* und *spelta* sind im südlichen Teil des Binnenlandes an mehreren Stellen sympatrisch, schließen sich jedoch an den meisten Standorten aus. Auf die ausführliche Beschreibung der dinarischen *Chondrina*-Arten und -Rassen folgt eine vorläufige Analyse der zur Verfügung stehenden *Chondrina*-Proben der südlichen und südöstlichen Balkan-Halbinsel: *spelta obsoleta*, *clienta arcadica*, *abundans* und *bulgarica* n. subsp.

**(1971a): Zur Anatomie und Systematik der Clausilien, IX. Dinarische Clausiliidae, III: Das Genus *Herilla*. — Archiv für Molluskenkunde, 101 (1/4): 39-88, Taf. 1-5.**

Teil IX der Arbeitenserie zur Anatomie und Systematik der Clausilien vermittelt die Ergebnisse einer ausführlichen Untersuchung des Gehäusebaus und der geographischen Verbreitung des Genus *Herilla*. Die taxonomische Revision ergibt, daß zum Genus die Arten *ziegleri*, *jabucica*, *korabensis*, *durmitoris*, *pavlovici*, *bosniensis* und *illyrica* mit insgesamt 38 Rassen gehören, wobei eine Reihe von Formen hinzukommen, deren Rassecharakter noch nicht gesichert ist. Arten und Rassen werden wie in Teil VIII dieser Serie beschrieben und abgebildet und ihre verwandtschaftlichen Beziehungen in Diagrammen dargestellt. Neu beschrieben werden die folgenden Rassen: *ziegleri klemmi*, z. *jaeckeli* n. nom. für *minor* Jaeckel non O. BOETTGER, *jabucica interrupta*, *pavlovici hiltrudae*, *bosniensis brancsiki*, *b. kusceri*, *b. rex*, *b. hannaee*, *illyrica medorella* und *i. savnikensis* n. nom für *violascens* MOELLENDORFF non WESTERLUND.

**(1971b): Zur Nomenklatur der *Cristataria*-Arten Palästinas. — Archiv für Molluskenkunde, 101 (1/4): 89-90.**

**(1971c): Zur Anatomie und Systematik der Clausilien, X. Zur Kenntnis des Genus *Cristataria* VEST 1867, I. — Archiv für Molluskenkunde, 101 (5/6): 237-261, Taf. 14-16.**

Teil X der Arbeitenserie zur Anatomie und Systematik der Clausilien enthält die Ergebnisse einer Untersuchung des Genus *Cristataria* VEST 1867 (Gehäuse aller verfügbaren Formen, Genitalsystem von sechs Arten). Sie lassen sich folgendermaßen zusammenfassen:

1. Das Genus gehört nach dem Bau des Genitalsystems zur Gattungsgruppe *Medora-Agathylla* in der Tribus Alopiaeae. Die Beziehungen zu *Albinaria* sind weniger eng als zu diesen beiden Gattungen.
2. Die taxonomisch bedeutsamen Merkmale des Genitalsystems der untersuchten Arten sind: Länge des Bursa-Divertikels, der Vagina, des Penis-Appendix und Ausbildung des Retractor penis.
3. Zum Genus sind folgende Arten zu stellen: *colbeauiana* (Typusart), *zilchi*, *delesserti*, *zelebori*, *vesicalis*, *floriensi*, *strangulata*, *albersi*, *dutaillyana*, *genezerethana*, *petrboki*, *haasi*, *forcarti*, *boissieri*, *cylindrelliformis*, *orrecta*, *staudingeri* und *elonensis*.
4. Neu beschrieben wurden: *C. zilchi* n. sp., *staudingeri pallaryi* n. subsp., *haasi kharbatensis* n. subsp. und *forcarti* n. sp.

**(1972a): Zur Anatomie und Systematik der Clausiliien, XI. Neue Formen und taxonomische Revision einiger Gruppen der Alopiinae. — Archiv für Molluskenkunde, 102 (1/3): 1-51, Taf. 1-5.**

Teil XI der Arbeitenserie zur Anatomie und Systematik der Clausiliien enthält die Neubeschreibungen mehrerer Arten und Rassen der südlichen Balkan-Halbinsel und die dadurch notwendig gewordene Revision einiger Gruppen der Alopiinae, deren Ergebnis in einer systematischen Gliederung derselben am Schluß der Arbeit zusammengefaßt ist:

1. Folgende Gruppen wurden revidiert: *Triloba*, *Agathylla*, *Sericata-Carinigera*, *Strigilodelima*, *Macedonica* (besonders die *frauenfeldi*-Gruppe), *Montenegrina*, *Protoherilla*, *Charpentieria*.

2. Neu beschrieben wurden: *Taraclausilia* n. gen. (Typusart: *mirabilis* n. sp.), *Sericata* (*Olympicosta*) n. subgen. (Typusart: *albicosta* O. BOETTGER), *Triloba thaumasia faueri* n. subsp., *Agathylla strigillata latestriata* n. subsp., *Sericata* (*Sericata*) *stussineri pachychilina* n. subsp. und *s. brandti* n. subsp., *S. (S.) inchoata klemmi* n. subsp., *S. (S.) regina* n. sp., *Isabellaria praecipua serviana* n. subsp., *I. thessalonica* n. sp., *Montenegrina laxa iba* n. subsp. und *I. chiasma* n. subsp., *M. perstriata radikae* n. subsp. und *p. drimica* n. subsp., *M. hiltrudae* n. sp., *M. kastoriae* n. sp., *M. irmengardis konitsae* n. subsp., *Taraclausilia mirabilis* n. sp. und *T. pseudofallax* n. sp.

3. Weitere wenig bekannte Arten und Rassen der Unterfamilie wurden beschrieben und abgebildet.

**(1972b): Nomenklatorische und systematische Bemerkungen zu Clausiliidae. — Archiv für Molluskenkunde, 102 (1/3): 53-55.**

**(1972c): Fossile Clausiliien, I. Clausiliien aus dem Pliozän W-Europas. — Archiv für Molluskenkunde, 102 (4/6): 165-188, Taf. 9-10, 10a.**

Die vorliegende Arbeit stellt den ersten Teil einer Serie über fossile Clausiliien dar und ist in vier Abschnitte gegliedert:

I. Revision des Systems der neogenen Clausiliien als Grundlage für weitere Arbeiten, aufbauend auf den Systemen von WENZ (1923) und ZILCH (1960). Die bisher beschriebenen Gruppen werden in die Phaedusinae, Neniinae, Mentissoideinae, Clausiliinae und Baleinae eingeordnet; die von WENZ (1923) aufgestellten Unterfamilien Triptychiinae und Laminiferinae werden nicht übernommen. Für *Clausilia perforata* O. BOETTGER 1877 (Burdigal), bisher bei *Charpentieria STABILE* eingeordnet, wird *Miophaedusa* n. gen. aufgestellt und ihre Zuordnung zu den Phaedusinae vorgeschlagen.

II. Beschreibung der Clausiliien-Fauna aus den o-pliozänen Süßwasser-Mergeln von Cessey-sur-Tille (Dép. Côte-d'Or): *Clausilia rolfbrandti* (SCHLICKUM), *Clausilia baudoni tillensis* n. subsp., *Clausilia pliodiptyx* n. sp., *Iphigena loryi* (MICHAUD), *Iphigena cf. densestriata* (ROSSMÄSSLER), *Laminifera cf. villafranchiana* (SACCO), *Monoptychia* n. gen. mit *M. monoptyx* n. sp., *Triptychia schlickumi* n. sp. Anhang: Clausiliien aus o-pliozänen Ablagerungen von Chambeire (Dép. Côte-d'Or) und Neublans (Dép. Saône-et-Loire).

IV. Vergleich der Clausiliien-Faunen von Frechen und Cessey-sur-Tille.

**(1973a): Zur Anatomie und Systematik der Clausiliien, XII. Phaedusinae, I: Phaedusen aus Nepal und ihre systematische Stellung innerhalb der Unterfamilie. — Archiv für Molluskenkunde, 103 (1/3): 63-85, Taf. 3.**

Part XII of this paper-series concerning the anatomy and systematics of Clausiliidae is the first, which deals with the subfamily Phaedusinae basing on the examination of some new clausiliids from Nepal. Contents: 1) Study of the systematic position of the Phaedusinae of Himalaya and neighbouring Further India with regard to the structure of their shells. Results: The Phaedusinae of Himalaya (group of *iodes* Benson and *Cylindrophaedusa*) can be classified with the genus *Hemiphaedusa*, while the species of Assam and Northern Burma belong to the genus *Oospira* (= *Pseudonenia* + *Acrophaedusa* of LOOSJES 1953). 2) Revision of the group of *iodes* basing on the morphology of shell with the diagnoses of the new species and subspecies of Nepal (*martensiana* n. sp. with *m. dhaulagirica* n. subsp., *kathmandica* n. sp. and *iodes jiriensis* n. subsp.), informations concerning their ecology and a revision of the nearly unknown clausiliids of Abor-Expedition. 3) Results of the examination of the genital organs of *Hemiphaedusa martensiana* n. sp. and the other available Phaedusinae in following order: a) detailed description of the genital organs of *H. martensiana* n. sp.; b) definition of the subfamily Phaedusinae basing on the morphology of genital organs (result of examination of ten species and the exploitation of the respective literature); c) concerning the systematical position of the eight examined species of *Serrulina*-group, with the

establishment of the new genus *Dobatia* n. gen. (type-species *Serrulina goettingi* BRANDT). Supplement: Description of a new species of Burma (*Oospira malaisei* n. sp.).

**(1973b): Zur Anatomie und Systematik der Clausilien, XIII. Neue Balkan-Formen der Mentissoideinae und Baleinae (mit taxonomischer Revision der zugehörigen Gruppen). — Archiv für Molluskenkunde, 103 (4/6): 179-208, Taf. 6-7, 7a.**

Teil XIII der Arbeitenserie zur Anatomie und Systematik der Clausilien enthält die Neubeschreibungen mehrerer Arten und Rassen der Unterfamilien Mentissoideinae und Baleinae von der Balkan-Halbinsel und die Revision der zugehörigen Gruppen, von den Mentissoideinae *Idyla*, von den Baleinae alle auf der Balkan-Halbinsel vorkommenden Gruppen, besonders *Bulgarica*. Das Ergebnis der Revision der Baleinae ist in einer systematischen Gliederung am Schluß der Arbeit zusammengefaßt. Neu beschrieben werden: *Euxinella* n. gen. (Typusart: *radikae* n. sp.), *Mentissella* n. gen. (Typusart: *rebeli* STURANY), *Idyla (Micridyla)* n. subgen. (Typusart: *pinteri* n. sp.), *Laciniaria (Rhodopiella)* n. subgen. (Typusart: *macilenta* ROSSMÄSSLER), *Bulgarica (Pavlovicia)* n. subgen. (Typusart: *pavlovici* NORDSIECK), *Idyla castalia boschi* n. subsp., *I. (Micridyla) pinteri* n. sp., *Euxinella radikae* n. sp., *Laciniaria (L.) plicata kueprijae* n. subsp., *Pseudalinda bajula lunella* n. subsp., *Bulgarica (Pavlovicia) pavlovici purpurascens* n. subsp., *B. (B.) moellendorffi banjana* n. subsp., *B. (B.) rugicollis grossui* n. subsp., *B. (B.) varnensis pseudofraudigera* n. subsp. und *B. (B.) urbanskii* n. sp.

**(1974a): Fossile Clausilien, II. Clausilien aus dem O-Pliozän des Elsaß. — Archiv für Molluskenkunde, 104 (1/3): 29-39, Taf. 1.**

La deuxième partie de la série concernant les Clausiliés fossiles se compose de la description des deux faunules du Pliocène supérieur de l'Alsace que j'ai recues par le paléontologue alsacien F. GEISSERT: a) gravière Mary Kocher à Sessenheim, argiles limniques, Villafranchien inférieur: *Triptychia geisserti* n. sp., *Cochlodina cf. laminata* (MONTAGU), *Iphigena cf. densestriata* (ROSSMÄSSLER), *Clausilia cf. bidentata* (STRÖM), *baudoni baudoni* MICHAUD, *strauchiana* H. NORDSIECK, *sessenheimensis* n. sp., *Neostyriaca cf. corynodes* (HELD). Cette faunule contient des espèces, qui jusqu'à présent n'ont été trouvées que dans des gisements d'âge pliocène supérieur, et d'autres qui jusqu'à présent sont connues seulement comme pléistocènes et comme récentes. Le rangement stratigraphique de GEISSERT (1967, 1972) est ainsi confirmé. La faunule de Sessenheim est comparée aux autres faunules du Pliocène supérieur de l'Europe occidentale. La nouvelle espèce de *Triptychia (geisserti* n. sp.) se distingue par des plis palatales vrais; elle démontre que le genre n'est éteint dans d'Europe centrale qu'à la limite Plio-Pléistocène. La nouvelle espèce de *Clausilia (sessenheimensis* n. sp.) fait voir la plus grande affinité avec *Clausilia whateliana* et *Neostyriaca corynodes*. b) Sondage l' hôpital civil à Strasbourg, Pliocène supérieur: *Triptychia* n. sp., *Clausilia baudoni baudoni* MICHAUD. Il s'agit de quelques fragments qui ne rendent pas possible la détermination d'âge plus exacte.

**(1974b): Zur Anatomie und Systematik der Clausilien, XIV. Phaedusinae, II: *Phaedusa bhutanensis* n. sp. und ihre Beziehungen zu benachbarten Arten. — Archiv für Molluskenkunde, 104 (1/3): 41-49, Taf. 2.**

The present paper deals with the description of a new species of the clausiliid subfamily Phaedusinae, *Phaedusa bhutanensis* n. sp., from Paro, Bhutan (shell and genital organs). It contains, too, the taxonomic revision of the following neighbouring species, which can be compared with it: *Phaedusa theobaldi* (BLANFORD), *burmanica* (GUDE) and *shanica* (O. BOETTGER), *Oospira monticola* (BLANFORD) and *arakana* (STOLICZKA).

**(1974c): Kritische Bemerkungen zu URBANSKI's Untersuchung der von PAVLOVIC beschriebenen Clausilien (1973). — Mitteilungen der deutschen malakozoologischen Gesellschaft, 3 (27): 174-177.**

**(1974d): Zur Anatomie und Systematik der Clausilien, XV. Neue Clausilien der Balkan-Halbinsel (mit taxonomischer Revision einiger Gruppen der Alopiinae und Baleinae). — Archiv für Molluskenkunde, 104 (4/6): 123-170, Taf. 3-6, 6a.**

Teil XV der Arbeitenserie zur Anatomie und Systematik der Clausilien besteht (ähnlich wie XI und XIII) aus Neubeschreibungen von Arten und Rassen der Unterfamilien Alopiinae und Baleinae von

der Balkan-Halbinsel und Revisionen der zugehörigen Gruppen, besonders der Gattungen *Isabellaria*, *Albinaria* (Gruppen der *maculosa* und *scopulosa*), *Macedonica* und *Montenegrina*. Neu beschrieben werden: *Vestia (Brabenecia)* n. subgen. (Typusart: *riloensis* A. J. WAGNER = *ranojevici* PAVLOVIC), *Herilla ziegleri edlaueri* n. subsp., *H. bosniensis dux* n. subsp., *Medora albescens unae* n. subsp., *Sericata (S.) inchoata paramythica* n. subsp., *Isabellaria venusta faueri* n. subsp., *I. thermopylarum triodos* n. subsp., *Albinaria scopulosa epirotes* n. subsp., *A. hiangs perlactea* n. subsp., *A. voithii gerolimena* n. subsp., *Macedonica macedonica slavica* n. subsp., *M. frauendorfii regia* n. subsp., *Carinigera pharsalica* n. sp., *C. megdova* n. sp., *C. haussknechti alticola* n. subsp., *C. h. hiltzudae* n. subsp., *Montenegrina janinensis sporadica* n. subsp., *M. j. fagorum* n. subsp., *M. dofleini pinteri* n. subsp., *M. hiltzudae densicostulata* n. subsp., *M. irmengardis voidomatis* n. subsp., *M. zilchi* n. sp., *Bulgarica (B.) hiltzudae* n. sp., *B. (B.) urbanskii paganella* n. subsp. und *B. (Strigilecula) vetusta pindica* n. subsp.

**(1975a): Zur Anatomie und Systematik der Clausiliien, XVI. Zur Kenntnis der Mentissoideinae und kaukasischen Baleinae. — Archiv für Molluskenkunde, 106 (1/3): 81-107, Taf. 7-8.**

Part XVI of the series of papers concerning the anatomy and systematics of Clausiliidae deals with the groups of Mentissoideinae and Baleinae from Near East and the Caucasus. The first part is a critical and completing revision of the arrangement of these groups given by LIKHAREV (1962a). This revision consists of a detailed system and accompanying notes concerning the following groups: *Scrobifera* (note 1), *Graciliaria* (2), *Armenica* (3, 4), *Bitorquata* (5), *Euxina* and allied groups (6, 7), *Euxinastria* (8), *Galeata* (9), *Mentissoidea* (10), *Mucronaria* (11), *Filosa* (12), *Olympicola* (13), *Index* (14, 15), *Quadriplicata* (16) and *Micropontica* (17). The following new taxa are established: *Strigileuxina* n. gen. (type-species *reuleauxi* O. BOETTGER) (note 6), *Odonteuxina* n. gen. (*iberica* ROTH) (7), *Likharevia* n. gen. (*gustavi* O. BOETTGER) (15), *Armenica (Akramowskia)* n. subgen. (*akramowskii* LIKHAREV) (4) and *Armenica (A.) likharevi* n. sp. (= *griseofusca* LIKHAREV non MOUSSON) (3). Remarks to the phylogenetic relationships of the two subfamilies are added. The second part is a study of *Armenica laevicollis* and its subspecies with description of the new taxa *A. l. hebitica* n. subsp., *l. paplagonica* n. subsp. and *disjuncta armenica* n. subsp. The third part contains the results of the examination of the Clausiliids from Sumelas (Trabzon, Turkey) which were collected by Roll and described by SZEKERES (1970) as the "species" *Acrotoma amoena*: *Armenica griseofusca* (MOUSSON), *Strigileuxina reuleauxi discedens* (RETOWSKI) and *Euxina rolli* n. sp. The systematic position of each species and its relatives is discussed.

**(1975b): Was ist *Clausilia thermopylarum* L. PFEIFFER? - Archiv für Molluskenkunde, 106 (1/3): 109-113, Taf. 9.**

This paper deals with the nomenclature in the genus *Isabellaria* VEST (Clausiliidae, Alopiinae). The examination of the syntypes in British Museum has proved that *Clausilia thermopylarum* L. PFEIFFER 1849 is not the species generally named so but identical with *I. venusta* (A. SCHMIDT 1868). The *thermopylarum* auct. non L. PFEIFFER has to be named *perplana* (O. BOETTGER 1877). Both species with subspecies are figured for comparison. The other taxa of *Isabellaria* described by L. PFEIFFER (1849) are discussed in a supplement.

**(1975c): RICHARD VON KIMAKOWICZ (1875 - 1973). — Mitteilungen der deutschen malakozoologischen Gesellschaft, 3 (28/29): 261-264 [Zilch, A. & H. Nordsieck].**

**(1976a): Zur Anatomie und Systematik der Clausiliien, XVIa. Die systematische Stellung von *Mucronaria* O. BOETTGER 1877. — Archiv für Molluskenkunde, 106 (4/6): 199-201.**

In part XVIa, supplement of part XVI of this series (1975), the systematic position of the group *Mucronaria* O. BOETTGER 1877 is cleared up. The examination of the genital organs (especially of the species *strauchi* O. BOETTGER) proves, that the group belongs to the subfamily Baleinae as a subgenus of the genus *Index* O. BOETTGER 1877 which therefore has to be named *Mucronaria*.

**(1976b): Fossile Clausiliien, III. Clausiliien aus dem O-Pliozän des Elsaß, II (mit Bemerkungen zur systematischen Stellung von *Triptychia*). — Archiv für Molluskenkunde, 107 (1/3): 73-82, Taf. 10, 10a.**

La présente étude est la continuation du travail concernant les clausiliidés fossiles du Pliocène supérieur de Sessenheim (Dép. Bas-Rhin) (H. NORDSIECK 1974) qui s'appuie sur un matériel beaucoup plus grand que celui de la première partie. Elle contient la description des nouvelles unités taxinomiques *Clausilia produbia* n. sp. et *strauchiana geisserti* n. subsp. et des remarques complémentaires importantes pour les autres espèces. L'observation détaillée de la structure interne de la coquille de *Triptychia geisserti* H. NORDSIECK démontre que ce genre se distingue de tous les clausiliidés par le développement de ses lamelles et plis. *Triptychia* ne peut pas être classés dans la famille Clausiliidae près de *Serrulina* (comme proposé par H. NORDSIECK 1972), mais a le rang d'une famille propre: *Triptychiidae* WENZ 1923. L'espèce décrite comme *Clausilia sessenheimensis* dans la première partie est rangée dans le genre *Macrogaster* (jusqu'à présent: *Iphigena*) après une nouvelle comparaison avec les espèces semblables.

(1977a): **Zur Anatomie und Systematik der Clausiliien, XVII. Taxonomische Revision des Genus *Albinaria* VEST.** — Archiv für Molluskenkunde, 107 (4/6): 285-307.

Part XVII of the series of papers concerning the anatomy and systematics of Clausiliidae contains a systematic revision of the genus *Albinaria* VEST basing on the examination of the whole type material which was available. It consists of four parts: 1) a discussion as to the definition of the genus and its subdivision into species groups; 2) critical remarks concerning the last revision of A. J. WAGNER (1923/24); 3) the proposal of a detailed system of the genus with comments on the systematic position and nomenclature of the species; 4) a compilation of all taxa of the genus as a support for further taxonomic work.

(1977b): **Kritische Bemerkungen zu den Beiträgen von GROSSU & TESIO zur Systematik der Clausiliidae.** — Archiv für Molluskenkunde, 108 (1/3): 69-72.

(1977c): **Zur Anatomie und Systematik der Clausiliien, XVIII. Neue Taxa rezenter Clausiliien.** — Archiv für Molluskenkunde, 108 (1/3): 73-107, Taf. 3-5.

In part XVIII of the series of papers concerning the anatomy and systematics of Clausiliidae the following new taxa are described: in the genus group *Pseudofusulus* n. gen. (type species: *varians* C. PFEIFFER), *Carinigera (Angiticosta)* n. subgen. (*superba* n. sp.), *Cochlodina (Cochlodinastra)* n. subgen. (*comensis* L. PFEIFFER), *Acrotoma (Bzybia)* n. subgen. (*claussi* n. sp.), *A. (Acrotomina)* n. subgen. (*semicincta* O. BOETTGER), *Fusulus (Erjaveciella)* n. subgen. (*approximans* A. Schmidt), *Macrogaster (Pseudovestia)* n. subgen. (*rolphii* TURTON), *Clausilia (Strobeliella)* n. subgen. (*whiteliana* STROBEL) and *Vestia (Vestiella)* n. subgen. (*roschitzi* BRANCSIK), in the species group *Cristataria hermonensis* n. sp., *Sericata lutracana* n. sp., *Carinigera superba* n. sp., *Macedonica thasia* n. sp., *M. ypsilon* n. sp., *M. brabeneci* n. sp., *Acrotoma claussi* n. sp., *Armenica zakatalica* n. sp., *Strumosa galli* n. sp., *Alopia microstoma grossuana* n. subsp., *A. plumbea rossmaessleri* n. subsp., *A. p. doftanae* n. subsp., *Albinaria idaea zeus* n. subsp., *A. i. rolli* n. subsp., *A. xanthostoma loosjesi* n. subsp., *Carinigera buresi dramaensis* n. subsp., *C. b. militis* n. subsp., *Montenegrina perstriata subcristatula* n. subsp., *M. dofleini occidentalis* n. subsp., *Macedonica frauendorfii tau* n. subsp. and *Laciaria bajula ditrichi* n. subsp. As substitute name is proposed: *Alopia glorifica elegantissima* n. nom. for *elegans* E. A. BIELZ [non CANTRAINE]. Revising remarks are made to the subfamilies Clausiliinae ("Fusulus") and Baleinae ("Laciaria"), the genera *Macedonica* O. BOETTGER, *Acrotoma* O. BOETTGER, *Armenica* O. BOETTGER and *Strumosa* O. BOETTGER and the species *Carinigera buresi* A. J. WAGNER and *Montenegrina perstriata* A. J. WAGNER.

(1978a): **Zur Anatomie und Systematik der Clausiliien, XIX. Das System der Clausiliien, I: Taxonomische Merkmale und Gliederung in Unterfamilien.** — Archiv für Molluskenkunde, 109 (1/3): 67-89.

Part XIX of this paper-series is the first part of a basic outline of the system of Clausiliidae. In the first chapter the taxonomic value of characters is discussed, and an arrangement of all used characters of the shell and the genital apparatus is given. This arrangement is completed by a detailed description of some characters of higher value, several of which have not or not sufficiently been used until now. In the second chapter a subdivision of the family into subfamilies is proposed as follows: the non-European subfamilies Phaedusinae, Garnieriinae and Neniinae, and the European subfamilies Serrulininae, Laminiferinae, Alopiinae, Mentissoideinae, Clausiliinae and

Baleinae. Each subfamily is characterized by a shell and genital diagnosis and its geographic distribution. Important new results are: 1) The apostrophic clausiliids do not form a monophyletic group and are therefore represented as three subfamilies: the Asiatic Garnieriinae, the American Neniinae and the European Laminiferinae; 2) the European *Serrulinina*-group can be separated from the Asiatic Phaedusinae as an independent subfamily on account of some important differences in the shell and genital morphology.

**(1978b): Zur Anatomie und Systematik der Clausilien, XX. Die rezenten Arten der Serrulininae und der Gattung *Caspiophaedusa*. — Archiv für Molluskenkunde, 109 (1/3): 91-101, Taf. 6.**

La 20e partie de la série concernant l'anatomie et la systématique des clausiliidés est une révision des espèces récentes de la sous-famille Serrulininae et du genre *Caspiophaedusa* LINDHOLM qui appartient probablement à la sous-famille Phaedusinae. Cette révision s'appuie surtout sur la morphologie de la coquille en prenant en considération pour la première fois aussi les parties internes de l'armature aperturale qui sont d'importance taxinomique. Le système proposé diffère de celui de LIKHAREV (1962) surtout par la subdivision de son genre *Serrulina* en plusieurs genres. Les unités taxinomiques suivantes sont décrites comme étant nouvelles: *Microphaedusa* n. gen. avec l'espèce-type *morgani* n. sp. et *Caspiophaedusa perlucens gilanensis* n. subsp.

**(1978c): Fossile Clausilien, IV. Neue Taxa neogener europäischer Clausilien, I. — Archiv für Molluskenkunde, 109 (1/3): 103-108.**

Dans la quatrième partie de la série concernant les clausiliidés fossiles la répartition des groupes européens post-écènes en sous-familles est discutée. Les nouvelles unités taxinomiques suivantes sont décrites: Eualopiinae n. subfam. (type et seul genre *Eualopia* O. BOETTGER), *Truciella* n. gen. (espèce-type *ballesioi* Truc), *Laminifera* (*Laminiplica*) n. subgen. (*cesseyensis* n. sp.) et *Clausilia* (*Pliodiptychia*) n. subgen. (*pliodiptyx* H. NORDSIECK).

**(1978d): Kritische Bemerkungen zu SZEKERES (1976): New aspects of an *Alopia*-system. — Mitteilungen der deutschen malakozoologischen Gesellschaft, 3 (32): 368-370.**

**(1978e): Beobachtungen bei der Haltung von Alopien. — Mitteilungen der deutschen malakozoologischen Gesellschaft, 3 (32): 371-373.**

**(1979a): Zur Anatomie und Systematik der Clausilien, XXI. Das System der Clausilien, II: Die rezenten europäischen Clausilien. — Archiv für Molluskenkunde, 109 (4/6): 249-275.**

Part XXI of this paper-series is the second part of a basic outline of the system of Clausiliidae which deals with the system of the Recent European groups. In the first chapter the extent of the respective taxonomic work is described, and the mistakes of the hitherto existing systems are discussed based on some important examples. The second chapter contains the system listing all subfamilies, tribes, genera and species. The following new tribes are established: Acrotomini n. trib. (type-genus *Acrotoma* O. BOETTGER, *Mentissoideinae*), Filosini n. trib. (*Filosa* O. BOETTGER, *Mentissoideinae*), Boettgeriini n. trib. (*Boettgeria* O. BOETTGER, *Mentissoideinae*) and Graciliariini n. trib. (*Graciliaria* BIELZ, *Clausiliinae*). Details of the distribution and type of habitat of the genera are enclosed. In connection with the system some explaining notes on different taxa follow, e. g. *Laminiferinae*, *Alopia*, *Delimini*, *Boettgeria* and *Graciliaria*. In the third chapter a list of the previous papers concerning the Recent European groups is given, and the included information for each genus is specified.

**(1979b): Revision des Genus *Alopia*, I. *Clausilia straminicollis* CHARPENTIER und *C. livida* var. *maxima* A.SCHMIDT (Gastropoda: Clausiliidae). — Archiv für Molluskenkunde, 110 (1/3): 53-61, Taf. 5-5a.**

Dans la première partie de la révision du genre *Alopia* (Gastropoda: Clausiliidae) l'identité des unités taxinomiques *Clausilia straminicollis* Charpentier et *C. livida* var. *maxima* A. SCHMIDT est éclaircie. En même temps les *Alopia* du Velican (Massif de Bucegi, Roumanie) sont revisées.

**(1979c): Eine neue *Albinaria*-Art von Kefallinia (Gastropoda: Clausiliidae). — Archiv für Molluskenkunde, 110 (1/3): 63-66.**

The paper deals with the description of a new species of the genus *Albinaria* (Gastropoda: Clausiliidae) from Kefallinia (Ionian Islands, Greece) differing from the other species of the island by its extraordinary sculpture.

**(1979d): Propunerি pentru ocrotirea taxonilor endemici sau rari ai genului *Alopia* in Romania. — Ocrot. nat. med. inconj., 23 (2): 169-172.**

Suggestion en vue de la protection des taxons endémiques ou rares du genre *Alopia* en Roumanie. L'auteur - l'un des meilleurs spécialistes du genre *Alopia* (Mollusca, Gastropoda, Clausiliidae) - signale, après des études et recherches effectuées en Roumanie, les espèces endémiques ou rares (25 taxons) en danger de disparition, menacées par la déforestation et l'exploitation des carrières. Il recommande la prise de mesures urgentes pour assurer leur survie.

**(1981a): Fossile Clausilien, V. Neue Taxa neogener europäischer Clausilien, II. — Archiv für Molluskenkunde, 111 (1/3): 63-95, Taf. 7-9.**

Dans la cinquième partie de la série concernant les clausiliidés fossiles les nouvelles unités taxinomiques suivantes sont décrites: *Serrulastra* n. gen. (espèce-type *amphiodon* Reuss), *Serruluna* n. gen. (*anodon* n. sp.), *Regiclausilia* n. gen. (*patula* n. sp.), *Trolliella* n. gen. (*silesiaca* n. sp.), *Serrulastra* (*Serruplica*) n. subgen. (*ptycholarynx* O. Boettger), *Pseudidyla* (*Canaliciella*) n. subgen. (*boettgeri* n. sp.) et les espèces suivantes: *Serrulella andreaei* n. sp., *multiplicata* n. sp., *Serrulastra laevissima* n. sp., *falkneri* n. sp., *Regiclausilia patula* n. sp., *Cochlodina oppoliensis* n. sp., *Pseudidyla boettgeri* n. sp. et *Trolliella silesiaca* n. sp. de Königlich Neudorf près Oppeln (Silésie), Miocène supérieur; *Serrulastra trolli* n. sp. de St. Veit a. d. Triesting (Bas-Autriche), Miocène supérieur; *Serrulastra ptycholarynx galli* n. subsp. de Gündlkofen (Bavarie), Miocène supérieur; *Cochlodina oppoliensis hollabrunnensis* n. subsp. de Hollabrunn (Bas-Autriche), Miocène supérieur; *Serrulastra michaudi* n. sp. de Celleneuve (Hérault), Pliocène supérieur; *Serruluna anodon* n. sp. et *Macrogaster multistriata* n. sp. de Sessenheim (Alsace), Pliocène supérieur. Plusieurs autres espèces peu connues sont caractérisées. L'âge du gisement miocène de Königlich Neudorf près Oppeln et des gisements pliocènes de Sessenheim et de Frechen-Fortuna est discuté.

**(1981b): Fossile Clausilien, VI. Die posteozänen tertiären Clausilien Mittel- und West-Europas. — Archiv für Molluskenkunde, 111 (1/3): 97-114.**

Dans la sixième partie de la série concernant les clausiliidés fossiles les résultats des recherches sur les clausiliidés tertiaires post-éocènes d'Europe centrale et occidentale sont présentés. Toutes les espèces connues sont classifiées à l'aide du système déjà proposé pour les espèces récentes. Des notes sur la répartition en sous-familles et sur les sous-familles Serrulininae, Eualopiinae et Clausiliinae s'ensuivent; simultanément les unités taxinomiques Constrictinae n. subfam. (genre-type *Constricta* O. BOETTGER) et *Serrulastra* (*Serrustigma*) n. subgen. (espèce-type *polyodon* REUSS) sont décrites. De plus la répartition stratigraphique des espèces est présentée dans une synopsis chronologique. Des conclusions importantes concernant l'évolution des clausiliidés sont ajoutées.

**(1981c): Revision des Genus *Alopia*, II. Zur Nomenklatur einiger Gipfelformen von *Alopia* (Gastropoda: Clausiliidae). — Archiv für Molluskenkunde, 111 (1/3): 115-121, Taf. 10.**

Dans la deuxième partie de la révision du genre *Alopia* (Gastropoda: Clausiliidae) la nomenclature déconcertante de quelques formes de sommet est mis en ordre. Il s'agit des noms *fussiana*, *canescens*, *glorifica* et *lactea*, qui sont employés par les auteurs pour des formes différentes.

**(1982a): Die Evolution des Verschlußapparats der Schließmundschnecken (Gastropoda: Clausiliidae). — Archiv für Molluskenkunde, 112 (1/6): 27-43.**

The family Clausiliidae (Gastropoda: Stylommatophora) is characterized by a closing apparatus in the last whorl of the shell (clausiliar) which consists of clausilium, lamellae (on the parieto-columellar wall) and plicae (on the palatal wall). It is quite sure that this apparatus functions as a protection from desiccation. The clausilium is homologous to a lamella; this assumption is proved by its position and origin between the lamella inferior and the lamella subcolumellaris. The clausiliar therefore originates from a system of folds which consisted of at least four lamellae and several plicae. The fact that uncompleted shells of some groups of the subfamily Serrulininae are

provided with two columellar lamellae leads to the supposition that the ancestor of Clausiliidae had columellar lamellae with a long continuation inward. This ancestor resembles to a group of fossil Stylommatophora found in the European Tertiary together with Clausiliidae: Megaspiridae, Filholiidae and Triptychiidae. The clausilium originated probably from a broadened columellar lamella of this ancestor obstructing the cavity, which was detached from the columella for the most part. By alignment of the remaining lamellae and plicae to the functioning of the clausilium the clausiliar was formed. Further evolution of the clausiliar towards a better closing took place in two principal steps: 1) a lunella was developed, 2) the normal clausiliar was transformed into a much perfect closing apparatus named *Graciliaria* clausiliar. On the other side reduction of the clausiliar occurred; it can be observed over all stages until total disappearance of plicae, clausilium and at last lamellae. Both evolutionary processes took place in many groups of the Clausiliidae in a parallel way. A survey of the evolution of the clausiliar is given by the diagram of figure 15.

(1982b): **Zur Stratigraphie der neogenen Fundstellen der Clausiliidae und Triptychiidae Mittel- und Westeuropas (Stylommatophora, Gastropoda).** — Mitt. Bayer. Staatsslg. Paläont. hist. Geol., 22: 137-155.

At present three stage systems are used for the stratigraphy of Neogene localities of continental mollusks none of which are applicable for different reasons. The erection of a complete stage system of European continental Tertiary based on mammals (Tab.1) makes it possible to apply it also for other fossils found in continental deposits. In this paper an attempt is made for the first time to classify the Neogene localities of land snails, in this case the pulmonate families Clausiliidae and Triptychiidae, into the new stage system (Tab. 2). The classification is substantiated by annexed notes; argumentation is especially detailed for the stratigraphical and paleontological important localities Oppeln, Frechen/Fortuna and Sessenheim (with Tab. 3 and 4). At last the stratigraphical importance of clausiliids and triptychiids for Neogene deposits is discussed.

(1984a): **Neue Taxa rezenter europäischer Clausilien, mit Bemerkungen zur Bastardierung bei Clausilien (Gastropoda: Clausiliidae).** — Archiv für Molluskenkunde, 114 (4/6): 189-211, Taf. 11-12.

The paper deals with the description of the following new taxa of Clausiliidae: the new species *Sericata* (*S.*) *liebegottae* n. sp., *S.* (*S.*) *subaii* n. sp., *Isabellaria butoti* n. sp., *Albinaria schuetti* n. sp., *A. hohorsti* n. sp., *A. mixta* n. sp., *Siciliaria* (*S.*) *spezialensis* n. sp., *Elia* (*Acroeuxina*) *retowskii* n. sp. and the new subspecies *Alopia* (*A.*) *helena* *interjecta* n. subsp., *Isabellaria chelidromia* *piperica* n. subsp., *I. campylauchen* *sikeensis* n. subsp., *Albinaria alajana* *dobati* n. subsp., *A. praeclera* *clarissima* n. subsp., *A. arcadica* *leucochroa* n. subsp., *A. messenica* *ithomensis* n. subsp., *Strumosa abanti* *schnelli* n. subsp., *Quadruplicata lederi* *martensi* n. subsp.. Since hybridization (introgession) obviously has played a part in the formation of several of these new taxa, summarizing remarks concerning this phenomenon are preceding the descriptions.

(1984b): **Ergänzungen zum System der rezenten europäischen Clausilien, I (Gastropoda: Clausiliidae).** — Archiv für Molluskenkunde, 114 (4/6): 213-216.

(1984c): **Eine neue *Triptychia* aus dem bayerischen Oligozän (Gastropoda: Triptychiidae).** — Heldia, 1 (1): 25-27, Taf. 3.

(1985a): **Zur systematischen Stellung von *Rillya* (Gastropoda: Stylommatophora).** — Heldia, 1 (2): 51-54, Taf. 7b.

L'examen d'un exemplaire de *Rillya columellaris* (MICHAUD) de la Bayerische Staatssammlung für Paläontologie und historische Geologie München (BSP) démontre que le genre *Rillya* MUNIER-CHALMAS appartient à la famille Clausiliidae; avec d'autres genres du Paléogène de l'Europe occidentale il forme un groupe qui peut-être a le rang d'une sous-famille propre.

(1985b): **The system of the Stylommatophora (Gastropoda), with special regard to the systematic position of the Clausiliidae, I. Importance of the excretory and genital systems.** — Archiv für Molluskenkunde, 116 (1/3): 1-24.

The original aim of this investigation was the clarification of the systematic position of the Clausiliidae; it made necessary a revision of the system of the Stylommatophora above family level, because the system now in use could not be accepted. This revision will be published in three parts. In this first part the importance of the excretory and genital systems for the classification of the Stylommatophora is discussed.

The results concerning the excretory system can be summarized as follows: There are two main types of excretory system, the orthurethrous and the sigmurethrous one in the broad sense, to which belong, too, the mesurethrous, the heterurethrous, and various unnamed types of slugs. An orthurethrous type without ureter can be regarded as plesiomorphous, while the mesurethrous one probably evolved several times independently, thus being apomorphous. The latter is, on the other hand, the plesiomorphous type, from which the other sigmurethrous types evolved. Therefore the excretory system though being of great taxonomic importance is not a suitable basis for the classification of the Stylommatophora. The excretory system of the Clausiliidae is of mesurethrous type; additional information as to its structure is given.

The results concerning the genital system are based on those which were published in an earlier paper dealing with the comparative genital morphology of snails (H. NORDSIECK 1966). Together with those of the comparative examination of the genitalia carried out recently they make possible the reconstruction of the plesiomorphous structure of the genital system and its main evolutionary changes. Especially regarded are the allospermiduct and the copulatory organs (end ducts) with the auxiliary copulatory organ (stimulatory organ). The different stimulatory organs of the Stylommatophora are homologous; the penial appendix can be regarded as the plesiomorphous type of the organ, while sarcobelum resp. gypsobelum with gland, dart apparatus and other still more modified organs mainly of slugs are apomorphous. The comparative examination of the end ducts leads to an arrangement of the Stylommatophora into three groups, which is probably more important for the classification than that based on the structure of the excretory system (terms of which still being used provisionally): Orthurethra, achatinid Sigmurethra comprising Elasmognatha, and helcid Sigmurethra. The genital system of the Clausiliidae is a comparatively plesiomorphous one and therefore more like that of the Orthurethra than that of the achatinid Sigmurethra. Considering the genital and excretory systems the Clausiliidae have a somewhat isolated systematic position near to the Orthurethra. Additionally the most important evolutionary changes of the genital system within the Clausiliidae are named.

**(1985c): Zwei neue Gattungen alttertiärer Clausiliien (Gastropoda: Stylommatophora). — Heldia, 1 (3): 83-87, Taf. 10.**

In this paper the following new taxa of fossil Clausiliidae are described: Rillyini n. trib. of Eualopiinae H. NORDSIECK, *Rillyarex* n. gen. (type-species "*Bulimus*" *ellipticus* J. SOWERBY, Upper Eocene, S. England) and *Rillyopsis* n. gen. (type-species "*Clausilia*" *inopinata* TRAUB, Upper Paleocene, Salzburg) of Rillyini. "*Bulimus*" *ellipticus* of the Bembridge Limestone (Isle of Wight) is a collective species comprising *Rillyarex ellipticus* s. s., *R. preecei* n. sp. (type locality Headon Hill) and a third yet undescribed form of Binstead. The other clausiliid of the Bembridge Limestone, "*Clausilia*" *striatula* EDWARDS, proved to be a collective species, too, comprising *Laminifera striatula* (EDWARDS) and *Triptychia edwardsi* n. sp.

**(1986a): Das System der tertiären Helicoidea Mittel - und Westeuropas (Gastropoda: Stylommatophora). — Heldia, 1 (4): 109-120, Taf. 15-17.**

In connection with systematic work on Helicoidea the systematic arrangement of the Tertiary groups of central and western Europe is revised. In part I the informations concerning recent Helicoidea which are needed for this revision are given. Part II contains a revised synopsis of all Tertiary groups which are sufficiently known; these can be classified with the Sphincterochilidae, Hygromiidae, Xanthonychidae (Eloninae) and Helicidae (Ariantinae, Helicinae). The stratigraphic distribution of these families resp. subfamilies is discussed. In part III the Pliocene Helicoidea are revised in detail. By a comparison of faunas succeeding in time (tabl.) the evolution of these groups is viewed upon; from this it results that the main faunal change of Helicoidea coincides with the climatic deterioration of the Pretiglian (~2.5 Ma). In part IV the following new taxa are described: Hygromiidae (Halolimnophelicinae) n. subfam. (type genus *Halolimnohelix* GERMAIN), Sphincterochilidae (Pseudoleptaxinae) n. subfam. (type genus *Pseudoleptaxis* PILSBRY), Eloninae

(Klikiini) n. trib. (type genus *Klikia* PILSBRY), *Norelona* n. gen (type species *Helix pyrenaica* DRAPARNAUD), *Soosia* (*Prosoosia*) n. subgen. (type species *Helix godarti* MICHAUD).

**(1986b): The system of the Stylommatophora (Gastropoda), with special regard to the systematic position of the Clausiliidae, II. Importance of the shell and distribution. — Archiv für Molluskenkunde, 117 (1/3): 93-116.**

In the second part of the paper on the system of the Stylommatophora the importance of shell and distribution for their classification is discussed. By a comparative study of the shell only a few characters were found which, in this regard, may be important. Plesiomorphous characters, such as an elevated shell, the presence of a fold system, and siphonostomy, make the reconstruction of the shell of the stem form possible. The apomorphous ones evolved several times in a parallel way so that there are no apomorphies of the shell which characterize major groups. As concerns especially the fold system, it was modified resp. reduced in many groups independently; most apomorphous fold systems can be found in the Clausiliidae and Urocoptidae. Hence it follows that the shell has only little importance for the higher classification of Stylommatophora.

A synopsis of the geographical distribution of the Stylommatophora had the following result: the Orthurethra are distributed world-wide, but have their centre of distribution in the northern regions of the earth so that the Stylommatophora may have originated there, too. The distribution pattern of the Clausiliidae fits their classification near to the Orthurethra well. The two sigmurethrous groups have an opposite distribution: the achatinid Sigmurethra (and Elasmognatha) have their centre of distribution in the southern regions of the earth, the helicid Sigmurethra in the northern ones. Therefore it can be concluded that the first are of Gondwanian, the latter of Laurasian origin; this can be evaluated as evidence for both groups being monophyletic ones. Based on these results an attempt is made to reconstruct the genesis of the Recent distribution, taking into consideration the findings of modern geology and the fossil record.

The results of a revision of the fossil Stylommatophora carried out in this connection correspond to those obtained from the study of distribution: the Paleozoic groups which are known only from Laurasia can all be classified with the Orthurethra. The only known Mesozoic groups, those of the Upper Cretaceous, and the Tertiary ones are more or less related to those distributed at present in the same region or have an uncertain systematic position; this is true, too, for the extinct European groups which were examined in more detail. In addition, the history of the stylommatophoran fauna of Europe from Cretaceous to Recent is outlined.

The following family taxa are described as new: Coelociidae n. fam. (type genus *Coelocion* PILSBRY), Solaropsidae n. fam. (*Solaropsis* BECK), † Palaeostoidae n. fam. (*Palaeostoa* ANDREAE), † Anostomopsidae n. fam. (*Anostomopsis* SANDBERGER), † Anadromidae (Vidaliellinae) n. subfam. (*Vidaliella* WENZ).

**(1986c): Beobachtungen bei der Haltung von Alopien, II. — Mitteilungen der deutschen malakozoologischen Gesellschaft, 38: 1-2.**

**(1987): Revision des Systems der Helicoidea (Gastropoda: Stylommatophora). — Archiv für Molluskenkunde, 118 (1/3): 9-50.**

In this paper the system of the Recent Helicoidea on the family level is revised. The revision results from a critical examination of the work of Schileyko who has changed this system radically.

In the first part the importance of the characters of the Helicoidea for the definition of family taxa is discussed; it results that at present for that purpose nearly none but characters of the genital system are suited. These characters, especially those of the stimulatory organ, and the other ones which can be used (type of jaw, chromosome number) are analysed, and the respective plesiomorphous and apomorphous character states are specified.

In the second part the system of the family taxa is revised in detail. The superfamily Helicoidea is redefined by elimination of some families which do not belong there (Camaenidae, Oreohelicidae, Ammonitellidae, Corillidae). The family taxa of Helicoidea are mainly characterized by their terminal genitalia, especially the stimulatory organ; additionally their distribution and the groups belonging there are specified. The following family taxa are described as new: Xanthonychidae (Monadeniinae) n. subfam. (type genus *Monadenia* PILSBRY), Xanthonychidae (Trichodiscininae) n. subfam (type genus *Trichodiscina* MARTENS), Xanthonychidae (Metostracinae) n. subfam (type genus *Metostracon* PILSBRY), Lysinoinae (Leptariontini) n. trib. (type genus *Leptarionta* FISCHER

& CROSSE) Humboldtianinae (Bunnyini) n. trib. (type genus *Bunya* H. B. BAKER), Trichiinae (Helicopsini) n. trib. (type genus *Helicopsis* FITZINGER), Ciliellinae (Trissexodontini) n. trib. (type genus *Trissexodon* PILSBRY), Ciliellinae (Oestophorini) n. trib. (type genus *Oestophora* Hesse), Ciliellinae (Caracollinini) n. trib. (type genus *Caracollina* BECK), Geomitrinae (Trochoideini) n. trib. (type genus *Trochoidea* BROWN).

The most important results of the revision are the following: 1) A separation of the Sphincterochilidae as an independent superfamily Sphincterochiloidea sensu FORCART is not necessary. 2) The Elonidae sensu GITTENBERGER can be ranked with the Xanthonychidae as a subfamily. 3) The majority of the western Palaearctic Helicoidea should be separated into two families, Hygromiidae and Helicidae. 4) The Helicellinae and Helicodontinae sensu HESSE are polyphyletic groups and must therefore be divided among different subfamilies of the Hygromiidae. 5) The Macaronesian Leptaxinae and Geomitrinae sensu auct. are nearly related to certain continental Hygromiidae and must therefore be ranked with the respective subfamilies. 6) The Ethiopian Helicoidea do not belong to the Bradybaenidae, but to the Hygromiidae.

In the third part an attempt is made to reconstruct the phylogeny of the Helicoidea. From the character comparison an earlier separation of the Sphincterochilidae and the Xanthonychidae and a later one of the Bradybaenidae, Hygromiidae and Helicidae result. The reconstruction of the phylogeny is compared with those of former authors, and the differences to that of SCHILEYKO are emphasized.

- (1988):** Neue Clausiliens aus NW-Griechenland. — Annalen des Naturhistorischen Museums Wien, 90 B: 197-201, 2 Taf..

From a clausiliid material which was collected by H. SATTMANN in northwestern Greece (Grammos mountains, environs of Prespa lakes) the following taxa are described: *Triloba thaumasia faueri* H. NORDSIECK, *Montenegrina janinensis grammica* n. subsp., *M. dofleini pindica* n. subsp., *M. dofleini prespaensis* n. subsp., and *M. sattmanni* n. sp..

- (1989):** *Falkneria* n.gen., eine neue Gattung der Helicodontinae (Gastropoda, Stylommatophora: Hygromiidae). — Heldia, 1 (5/6): 165-168, Taf. 25.

- (1990):** Revision der Gattung *Clausilia* DRAPARNAUD, besonders der Arten in SW-Europa (Das *Clausilia rugosa*-Problem) (Gastropoda: Stylommatophora: Clausiliidae). — Archiv für Molluskenkunde, 119 (4/6): 133-179, 3 Taf..

In this paper the genus *Clausilia* DRAPARNAUD, with special regard to the species in southwest Europe (France, Iberian peninsula, Piedmont, Apenninan peninsula) is revised, and thereby the long-standing *Clausilia rugosa* problem is solved. In the first part the history of this problem from the description of *rugosa* by DRAPARNAUD until today is described. It is shown that, apart from the nomenclatural chaos produced by the "Nouvelle École", the problem originated mainly from the permanent mingling resp. confounding of the species *rugosa* and *bidentata*. In the second part the system of the genus is revised, and the phylogeny of the species belonging to it is reconstructed. The genus (except for the subgenus *Strobeliella* H. NORDSIECK) contains five species: *rugosa* DRAPARNAUD, with which *parvula* Férussac and *pinii* Westerlund must be classified as subspecies, *bidentata* STRÖM, *cruciata* STUDER, *pumila* C. PFEIFFER, and *dubia* DRAPARNAUD. The diagnoses of these species based on shell and genital morphology are given; information on their distribution and biotope is added. The species are divided among two subgenera: *Clausilia* (*Andraea*) L. PFEIFFER including *dubia* and *C. (Clausilia)* including the other species. The plesiomorphous and apomorphous characters of the species are ascertained, and by means of them their phylogeny is reconstructed. In the third part the species of southwest Europe, especially *rugosa*, *bidentata* and *cruciata*, are described in detail. These species are divided into subspecies the diagnoses and distribution of which are given. The taxa which were described until now, among them the numerous ones of the "Nouvelle École", are synonymized with the respective subspecies. The *rugosa* of the region concerned is divided into the subspecies *r. rugosa* (with microgeographical race *r. andusiensis* COUTAGNE), *r. lamalouensis* LETOURNEUX, *r. belonidea* BOURGUIGNAT, *r. reboudii* DUPUY (with *r. provincialis* Coutagne), *r. parvula* FÉRUSSAC, *r. penchinati* BOURGUIGNAT (with *r. magdalenica* SALVANA), and *r. pinii* WESTERLUND, the *bidentata* of this region into the subspecies *b. bidentata*, *b. abietina* DUPUY, *b. moniziana* LOWE and *b. crenulata* RISSO, and the *cruciata* of this region into the subspecies *c. pedemontana* n. subsp. (Locus typicus: Piedmont, Viù)

and *c. cruciata* (with *c. amiatae* MARTENS). By means of the examined fossil forms of the European Plio- and Pleistocene which can be classified with resp. joined to the Recent species without exception the evolution of these species is traced back to the Pliocene stem species. In this connection the following two fossil taxa are described as new: *Clausilia* (*C.*) *rugosa antiquitatis* n. subsp. (Locus typicus and stratum typicum: Lower Austria, Radlbrunn, Plio-Pleistocene limit) and *C. (C.) stranzendorfensis* n. sp. (Lower Austria, Stranzendorf A, Upper Pliocene). Of special interest is the evolution of the species *rugosa*, which represents a species transformation being still in progress.

**(1993a): Phylogeny and system of the Pulmonata (Gastropoda). — Archiv für Molluskenkunde, 121 (1/6): 31-52.**

In the present paper the phylogeny of the Pulmonata is reconstructed and transformed into a system. In the first part the suitable characters are compiled, and the respective character states are evaluated. Characters of the alimentary, central nervous, excretory, and genital systems and the chromosome number and their evolutionary changes are described in detail. In the second part the phylogeny of the pulmonates is discussed. It is demonstrated that they have several probable synapomorphies which is evidence of the monophyly of the group; by a combination of all plesiomorphic character states the stem form of the pulmonates is reconstructed. The phylogenetic relations of the Pulmonata to the other Euthyneura are discussed (cf. fig. 1-2). The phylogeny of the higher taxa within the pulmonates is reconstructed by means of 93 probable apomorphies; it is presented in a phylogram (cf. fig. 3-6). In the third part the phylogram is transformed into a system. The systems proposed in this century are summarized; the more important proposals of the last decades are discussed. In the system proposed in this paper the Pulmonata are evaluated as a subclass; this is divided into two suborders (Basommatophora, Eupulmonata) and six orders (Thalassophila, Hygrophila, Trimusculiformes, Systellomatophora, Actophila, Stylommatophora).

The following order taxa are described as new: Chilinoidei n. subord., Otinoidei n. subord., Acroloxoinei n. infraord., Planorboinei n. infraord., and Clausilioinei n. infraord..

**(1993b): Das System der paläarktischen Hygromiidae (Gastropoda: Stylommatophora: Helicoidea). — Archiv für Molluskenkunde, 122 (= ZILCH-Festschrift): 1-23.**

In the present paper a system of the Palearctic Hygromiidae is proposed which is the result of a phylogenetic analysis of the family which shall be published later. The family-group system is nearly the same as that of the revision of the system of the Helicoidea (H. NORDSIECK 1987), while the genus-group system corresponds largely with that proposed by the authors who were concerned with hygromiid groups in the last years (SCHILEYKO 1978, GIUSTI and MANGANELLI 1987-1990, HAUSDORF 1988). the changes which are proposed for both are substantiated in notes which is the main part of the paper. The following genus-group taxa are described as new: *Hiltrudia* n. gen. (type species: *mathildae* WESTERLUND), *Kovacsia* n. gen. (*kovacsi* VARGA & PINTÉR), *Pseudhesseola* n. gen. (*bactriana* HUTTON), *Caracollina* (*Paroestophora*) n. subgen. (*huloti* PALLARY), and *Monacha* (*Eutheba*) n. subgen. (*cantiana* MONTAGU).

**(1993c): Türkische Clausiliidae, I: Neue Arttaxa des Genus *Albinaria* VEST in Süd-Anatolien (Gastropoda: Stylommatophora). — Stuttgarter Beiträge zur Naturkunde(Ser. A), Nr. 499: 31 S., 6 Taf..**

In the first paper of a series of publications concerning Turkish clausiliids the results of an investigation of the *Albinaria* species of southern Anatolia are published. The species are diagnosed, their ranges, as far as known, are specified, and their subspecies and synonyms are given. Besides, the *Albinaria* fauna of southern Anatolia is compared with that of the neighbouring regions of the eastern Mediterranean, and the distributional relations of the species in southern Anatolia are discussed. In chapter 5. the following taxa are described as new: *Albinaria kemerensis* n.sp., *A. lycica* n. sp., *A. myrensis* n. sp., *A. papillifera* n. sp., *A. pellucida* n. sp., *A. percristata* n. sp., *A. forbesiana boettgeri* n. subsp., *A. inauris costicollis* n. subsp., *A. lycica phaselis* n. subsp., *A. papillifera cilicica* n. subsp., *A. p. menkhorsti* n. subsp., *A. percristata neuberti* n. subsp., *A. p. vallicola* n. subsp., *A. p. violae* n. subsp., *A. schuetti costulifera* n. subsp., *A. s. montana* n. subsp., and *A. s. regularis* n. subsp. from southern Anatolia, and *A. alajana cypria* n. subsp. from northern Cyprus.

**(1993d): Beiträge zur Nomenklatur der europäischen Binnenmollusken, I. Kritische Anmerkungen und Berichtigungen zur Nomenklatur von Arttaxa der Clausiliidae.** — *Heldia*, 2 (1/2): 33-42.

**(1994): Türkische Clausiliidae, II: Neue Taxa der Unterfamilien Serrulininae und Mentisoideinae in Anatolien (Gastropoda: Stylommatophora).** — *Stuttgarter Beiträge zur Naturkunde(Ser. A)*, Nr. 513: 36 S., 6 Taf..

In the second paper of the series of publications concerning Turkish clausiliids new taxa of the subfamilies Serrulininae and Mentisoideinae are described. In chapter 2. a systematic list of the Turkish species of both subfamilies is given, the changes compared to former systems are substantiated, and the following family and genus taxa are described as new: *Strumosini* n. trib. (type genus *Strumosa* O. Boettger 1877), *Strigileuxinini* n. trib. (type genus *Strigileuxina* H. NORDSIECK 1975), *Phrygica* n. gen. (type species *P. riedeli* n. sp.), *Pontophaedusella* n. gen. (type species *P. ofensis* n. sp.), and *Idyla* (*Strigilidyla*) n. subgen. (type species *I. liebegottae* n. sp.). In chapter 3. informations concerning some less known species are given, and the following species taxa are described as new: *Galeata tumluensis* n. sp., *Phrygica euxinaformis* n. sp., *P. jelskii* n. sp., *P. raehlei* n. sp., *P. riedeli* n. sp., *Pontophaedusella ofensis* n. sp., *Sprattia beycola* n. sp., *S. sillyonensis* n. sp., *Armenica gracillima principalifera* n. subsp., *A. g. spiralisfera* n. subsp., *A. laevicollis bileki* n. subsp., *A. l. costifera* n. subsp., *A. l. samsunensis* n. subsp., *Dobatia multidentifera anamurensis* n. subsp., *Phrygica riedeli jansseni* n. subsp., and *Sumelia boniferae latecostata* n. subsp. Besides, a new species from Greece is described: *Idyla* (*Strigilidyla*) *liebegottae* n. sp. For *Euxina persica persica* sensu LIKHAREV 1962 [non O. BOETTGER 1879] from Iran the name *Euxina mazanderanica* n. sp. is proposed.

**(1995): Iranische Clausiliidae: Die Arten in Gilan und Mazandaran (mit Beschreibung neuer Taxa) (Gastropoda: Stylommatophora).** — *Stuttgarter Beiträge zur Naturkunde(Ser. A)*, Nr. 527: 27 S., 3 Taf..

Faunistic and systematic data on Iranian clausiliid-species from Gilan and Mazandaran are presented. The available informations on the localities in which most of the material was collected are reported (chapters 4. and 5.). Species not yet revised are diagnosed, and their ranges, as far as known, are specified (6.). The following taxa are described as new: *Euxina achrafensis* n. sp., *E. forcarti* n. sp., *E. gastron* n. sp., *Likharevia gilanensis* n. sp., *Euxina talyschana astarana* n. subsp., and *Likharevia gilanensis costulata* n. subsp. The zoogeographical position of Hyrcania, the distribution and the ecology of the species, and the phylogeny of the Hyrcanian *Euxina* species are discussed (7.).

**(1996a): Beiträge zur Nomenklatur der europäischen Binnenmollusken, VII. Kritische Anmerkungen und Berichtigungen zur Nomenklatur von Arttaxa der Clausiliidae, 2.** — *Heldia*, 2 (3/4): 91-96.

**(1996b): Neue Clausiliens-Taxa aus Albanien (Gastropoda: Clausiliidae).** — *Schriften zur Malakozoologie*, 9: 7-16, Taf. 2-3.

From a land-snail material which was collected in Albania mainly by H. SATTMANN in 1992 and by F. WELTER-SCHULTES and Albanian co-workers in 1995 the following clausiliid taxa are described as new: *Agathylla merditana scraparana* n. subsp., *Montenegrina ersekensis* n. sp., *M. janinensis coerulescens* n. subsp., *M. laxa miraka* n. subsp., *Siciliaria pantocratoris margaritifera* n. subsp., and *S. p. splendens* n. subsp.

**(1997a): Nomenclatural critique of MINATO's (1988, 1994) papers.** — *Venus*, 56 (1): 62-65.

**(1997b): Annotated check-list of the Taiwanese Phaedusinae (Gastropoda: Stylommatophora: Clausiliidae).** — *Mitteilungen der deutschen malakozoologischen Gesellschaft*, 60: 11-19.

A check-list of the Taiwanese clausiliids which contains 64 species taxa grouped to 38 species is presented. Systematic and nomenclatural problems are discussed in 22 notes. A zoogeographic analysis of the Taiwanese clausiliid fauna is added.

**(1997c): Phylogeny of and within the *Albinaria-Isabellaria* group (Gastropoda: Pulmonata: Clausiliidae). — Heldia, 4, Sonderheft 5: 53-61.**

The investigation of the morphology and distribution of the genus *Albinaria* VEST and its relations to the genus *Isabellaria* VEST together with a critical review of the respective modern literature treating had the following results:

1. *Albinaria* belongs to the tribe Medorini of the subfamily Alopiinae. Within the Medorini the group *Albinaria* (with *Sericata* BOETTGER) + *Isabellaria* is recognized as a monophyletic one. *Sericata* is classified as a subgenus of *Albinaria*.
2. The species-groups of *Albinaria* may be monophyletic ones if they are characterized by apomorphies and have a coherent distribution. Introgression caused by hybridization of species, which is obviously a frequent phenomenon, can obscure the phylogenetic relations of species and groups. The hypothesis of paraphyletic species within *Albinaria* (as proposed by SCHILTHUIZEN & GITTINGER 1996) is not accepted.
3. The question if *Isabellaria* is a monophyletic or polyphyletic unit remains open, but the first alternative appears more probable. There are strong arguments against the polyphyletic origin of the *Isabellaria* species of the eastern Peloponnes (as concluded by GITTINGER & SCHILTHUIZEN 1996).

**(1998a): A new subspecies of *Albinaria idaea* (L. PFEIFFER 1850) (Gastropoda: Stylommatophora: Clausiliidae). — Heldia, 2 (5/6): 123-126, pl. 17.**

A prominently ribbed *Albinaria* from the Rouwas gorge near Zaros, Central Crete, is described as a new subspecies of *A. idaea* (L. PFEIFFER 1850): *A. i. lindneri* n. subsp. The subspecies division of *A. idaea* and the relations of the new subspecies to the other ones are discussed.

**(1998b): Notes on the nomenclature of Phaedusinae (Gastropoda, Stylommatophora: Clausiliidae). — Heldia, 2 (5/6): 127-131.**

Occupied with a revision of the Phaedusinae which contains the greater part of Asiatic Clausiliidae I could state that several nomenclatural corrections and changes in this subfamily are necessary. With this paper the nomenclatural problems shall be solved before the main paper is published.

**(1998c): Zur Nomenklatur der Triptychiidae (Gastropoda: Stylommatophora: Clausilioidea). — Heldia, 2 (5/6): 167-168.**

**(1998d): Critical revision of the system of the Japanese Phaedusinae, proposed by MINATO (1994) (Gastropoda: Stylommatophora: Clausiliidae). — Archiv für Molluskenkunde, 127 (1/2): 21-32.**

The system of the Japanese Clausiliidae proposed by MINATO (1994) is revised. The revision was necessary because of the splitting in the genus system, the non-consideration of some taxonomic characters, and the wanting of a phylogenetic foundation of the system. The phylogenetic analysis which bases on the phylogenetic hypotheses worked out in a former paper (NORDSIECK 1982) concerns mainly shell characters; it results in major changes of the system. The Japanese Clausiliidae which belong to the Phaedusinae are subdivided into two tribes, Megalophaedusini and Phaedusini; furthermore those of the former tribe are arranged to groups which are characterized by certain synapomorphies. More detailed information is given for the groups *Neophaedusa*, *Placeophaedusa*, *Phaedusa*, and *Pictophaedusa* sensu Minato, the genera *Stereozaptix* and *Diceratoptyx*, and for some species groups and species. The following genus group taxa are described as new: *Plicophaedusa* n. gen. (type species *Clausilia tosana* PILSBRY), *Reinia* (*Parareinia*) n. subgen. (type species *Clausilia euholostoma* PILSBRY).

**(1999a): Annotated check-list of the species of the *Albinaria-Isabellaria* group (Gastropoda: Stylommatophora: Clausiliidae). — Mitteilungen der deutschen malakozoologischen Gesellschaft, 62/63: 1-21.**

A check-list of the species of the *Albinaria-Isabellaria* group is presented. The system used is based on the shell morphology and the distributional relations of the species. Some basic aspects of the respective systematic work are explained in the general remarks. The alterations of the current system (NORDSIECK 1977) and the integration of the newly described species as well as the results of the examination of several problematic species and groups are discussed in 30 notes.

**(1999b): A critical comment on SZEKERES' papers concerning Clausiliidae in Basteria 62, 1998. — Mitteilungen der deutschen malakozoologischen Gesellschaft, 62/63: 23-25.**

**(1999c): *Sympychiella annae* n. sp., an extraordinary clausiliid from northern Peru (Gastropoda Pulmonata: Clausiliidae). — Basteria, 63: 165-170.**

A new clausiliid species and genus from northern Peru, *Sympychiella annae* n. gen. n. sp., is described. The unique character combination of its shell (without neck keel, non-apostrophic aperture formation, one single lamella instead of superior and inferior lamellae, G-type clausiliar) does not allow a classification within one of the known subfamilies.

**(1999d): Critical revision of some Peruvian Neniinae treated by LOOSJES & LOOSJES-VAN BEMMEL (1966, 1984, 1989), with the descriptions of new taxa (Gastropoda Pulmonata: Clausiliidae). — Basteria, 63: 171-183.**

Some Peruvian Neniinae species and genera which were treated by LOOSJES & LOOSJES-VAN BEMMEL (1966, 1984, 1989) are taxonomically revised. This concerns the following genera sensu LOOSJES & LOOSJES-VAN BEMMEL: *Columbinia* and related genera, *Hemicena*, *Peruinia*, *Bequaertinenia*, *Temesa*, *Neniatracta* and related genera, *Steeriana*, and *Andiniella*. The following taxa are described as new: *Cyclonenia* n. gen., *Cyclonenia alpina* n. sp., *C. violetta* n.sp., *Cylindronenia cicatricosa leimebambensis* n. subsp., *Pfeifferiella haasi magnifica* n. subsp., *Neniatracta exoptata* n. sp.

**(2000a): Annotated check-list of the fossil (pre-Pleistocene) Clausiliidae (Gastropoda: Stylommatophora) from central and western Europe. — Mitteilungen der deutschen malakozoologischen Gesellschaft, 65: 1-15.**

A check-list of the fossil (pre-Pleistocene) Clausiliidae from central and western Europe which contains 147 species is presented. Systematical changes and important examination results are discussed in 15 notes. A stratigraphical list of the Tertiary species and a chronological survey of pre-Pleistocene clausiliid faunas are added.

**(2000b): *Heudiella oliveriana* ANNANDALE 1924 from China is not a buliminid but a juvenile clausiliid (Gastropoda: Stylommatophora: Clausiliidae). — Mitteilungen der deutschen malakozoologischen Gesellschaft, 65: 17-20.**

The type species of *Heudiella* ANNANDALE 1924, *H. oliveriana* ANNANDALE, has been founded on a juvenile specimen of *Macrophaedusa veruta* (HEUDE) (Clausiliidae). The other species which were placed in this genus by THIELE (1931), YEN (1939) and ZILCH (1959) should be classified within the genus *Mirus* ALBERS (Buliminidae).

**(2000c): Remarks on *Cochlodina costata* (C. PFEIFFER 1828) (Gastropoda: Stylommatophora: Clausiliidae). — Mitteilungen der deutschen malakozoologischen Gesellschaft, 65: 21-22.**

It is recommendable to maintain the combination of the taxa related to *Cochlodina costata* (C. PFEIFFER 1828) in one species which was criticized by BOLE (1991) until the open questions which concern their relations are answered by a revision of the whole species.

**(2001a): Critical annotations to part 5 (Clausiliidae) of SCHILEYKO's Treatise on Recent terrestrial pulmonate molluscs (2000) (Gastropoda: Stylommatophora). — Mitteilungen der deutschen malakozoologischen Gesellschaft, 66: 13-24.**

Part 5 (Clausiliidae) of SCHILEYKO's Treatise (2000) was critically looked over. The informations concerning the systematical position of taxa, the determination of species and the nomenclature which in my opinion are incorrect are corrected resp. improved. The systematical position of *Caspiophaedusa* LINDHOLM (Serrulininae), *Laeviphaedusa* LIKHAREV & STEKLOV (Serrulininae), *Idyla* H. & A. ADAMS (Mentissoideinae) and *Euxinella* H. NORDSIECK (Mentissoideinae) is discussed in more detail. From the examination of syntypes it follows that *Bulimus denticulatus* OLIVIER 1801 is a senior synonym of *Bulgarica thessalonica* (ROSSMÄSSLER 1839) so that this species has to be named *Bulgarica denticulata* and the species currently named so *B. erberi* (FRAUENFELD 1867). The name of the subgenus recently separated as *Macrogastra* (*Plicaphora*) HARTMANN 1844 is corrected to *M. (Pyrostoma)* VEST 1867. For some genus taxa type species are

designated: *Albanodelima* A. J. WAGNER 1924 (*Delima* (A.) *umbilicata* (O. BOETTGER 1879)); *Baleoclausilia* BIELZ 1861 (*Balea livida* (MENKE 1828)); *Ithyption* DEAN 1918 (*Alopia livida* (MENKE 1828)); *Priodelima* A. J. WAGNER 1924 (*Delima* (P.) *sublamellosa* (O. BOETTGER 1883)); *Protalbinaria* A. J. WAGNER 1924 (*Albinaria* (P.) *sericata* (L. PFEIFFER 1850)).

- (2001b): ***Clausilia neutra* WESTERLUND 1898 (Gastropoda: Stylommatophora: Clausiliidae).** — **Mitteilungen der deutschen malakozoologischen Gesellschaft, 66: 25-26.**

The discovery of a specimen of the series from which *Clausilia neutra* WESTERLUND 1898 was described made it possible to identify this forgotten species as *Agathylla merditana* (A. J. WAGNER 1914) which therefore must bear the name *Agathylla neutra* (WESTERLUND 1898).

- (2001c): **Revision of the system of the Phaedusinae from mainland China with the description of new taxa (Gastropoda: Stylommatophora: Clausiliidae).** — **Archiv für Molluskenkunde, 129 (1/2): 25-63, 6 pls.**

The system of the Phaedusinae from mainland China is revised. This revision was overdue because the system used until now (cf. YEN 1939, CHEN & ZHANG 1999) dates from the past century. It is founded on an examination of the shell characters of nearly all described species taxa. The validity of these taxa was checked, and the valid species were arranged to groups. These were subjected to a phylogenetic analysis basing on the phylogenetic hypotheses worked out in a former paper (NORDSIECK 1982). This analysis results in a genus system which corresponds to that received by the examination of the Japanese Phaedusinae (NORDSIECK 1998b). The genera are classified with two tribes, Megalophaedusini and Phaedusini, those of the first tribe either have only plesiomorphic characters or are defined by certain apomorphies of the lunellar. The following genus taxa are described as new: *Celsiphaedusa* n. gen. (type species *Clausilia celsa* GREDLER); *Macrophaedusella* n. gen. (*Macrophaedusella jesuitica* n. sp.); *Serriphaedusa* n. gen. (*Clausilia serrata* DESHAYES), *Bathyptychia* (*Brachyptychia*) n. subgen. (*Clausilia breviplica* MÖLLENDORFF), *B.* (*Strictiphaedusa*) n. subgen. (*Clausilia strictilabris* SCHMACKER & BOETTGER), *Hemiphaedusa* (*Hemiphaedusoides*) n. subgen. (*Clausilia moellendorffiana* HEUDE), *H.* (*Labyrinthiphaedusa*) n. subgen. (*Clausilia labyrinthoides* SYKES), *H.* (*Margaritiphaedusa*) n. subgen. (*Clausilia margaritifera* BAVAY & DAUTZENBERG), *Phaedusa* (*Metaphaedusa*) n. subgen. (*Clausilia pseudobensoni* BOETTGER & SCHMACKER). The following species taxa are described as new: *Bathyptychia* (*B.*) *martensi* n. sp., *Euphaedusa costifera* n. sp., *E. krejci* n. sp., *E. yunnancola* n. sp., *Hemiphaedusa* (*Synprosphyma*) *ehrmanni* n. sp., *H.* (*S.*) *pseudoinversa* n. sp., *Macrophaedusella jesuitica* n. sp., *Oospira* (*Formosana*) *schawalleri* n. sp., *Phaedusa* (*P.*) *boettgeri* n. sp., *P.* (*Metaphaedusa*) *pseudaculus* n. sp., *Euphaedusa gemina* *davidi* n. subsp., *Hemiphaedusa* (*H.*) *pluvialis* *zilchi* n. subsp., *H.* (*Margaritiphaedusa*) *protrita* *hunancola* n. subsp., *H.* (*M.*) *rusticana* *amoena* n. subsp., *Phaedusa* (*P.*) *potanini* *pretiosa* n. subsp.

- (2002a): **Die Typen und Typoide des Natur-Museums Senckenberg, 83: Mollusca: Clausiliidae (7): Alopiinae (5): Delimini (1).** — **Archiv für Molluskenkunde, 130 (1/2): 201-237, 10 pls.** [Zilch, A., H. Nordsieck & E. Neubert].

- (2002b): **Contributions to the knowledge of the Delimini (Gastropoda: Stylommatophora: Clausiliidae).** — **Mitteilungen der deutschen malakozoologischen Gesellschaft, 67: 27-39.**

The changes of the current system of the Delimini (Alopiinae, Clausiliidae) (NORDSIECK 1979), which are necessary according to the results of recent investigations, are presented by a revised system and discussed in 11 notes in which, besides, further informations are given.

- (2002c): **The systematics of the Bradybaeninae (Gastropoda: Stylommatophora: Bradybaenidae), an example for the work of divergent systematic schools.** — **Mitteilungen der deutschen malakozoologischen Gesellschaft, 67: 41-47.**

The history of the system of the Bradybaeninae (Bradybaenidae, Helicoidea) is outlined. It is shown that the more recent papers which deal with Bradybaeninae were presented by different systematic schools the results of which are in no way compatible. Therefore, it is proposed to make a new start in Bradybaeninae systematics.

(2002d): How to determine clausiliid species, I: Widespread species of *Clausilia* DRAPARNAUD (Gastropoda: Stylommatophora: Clausiliidae). — Mitteilungen der deutschen malakozoologischen Gesellschaft, 68: 31-36 [NORDSIECK, H. & E. NEUBERT].

It is the aim of the present paper to facilitate the determination of the widespread species of the genus *Clausilia* DRAPARNAUD. The diagnostic shell characters of the *Clausilia* species are listed, and comparative illustrations of their shells are given.

(2002e): The subspecies classification of *Clausilia dubia* DRAPARNAUD (Gastropoda: Stylommatophora: Clausiliidae), a critical revision. — Mitteilungen der deutschen malakozoologischen Gesellschaft, 68: 37-44.

The subspecies classification of *Clausilia (Andraea) dubia* DRAPARNAUD 1805 is revised. The species is subdivided into two main subspecies, *C. dubia vindobonensis* A. SCHMIDT 1856 s. l. and *C. d. dubia* s. l.. The other subspecies are affiliated to these main subspecies or are intermediate between them. The latter applies also to the weakly sculptured subspecies from the eastern Alps, *C. d. tettelbachiana* ROSSMÄSSLER 1838.

(2002f): Annotated check-list of the South East Asian Phaedusinae, with the description of new taxa (Gastropoda, Pulmonata, Clausiliidae). — Basteria, 66: 85-100.

A revised check-list of the Phaedusinae from South East Asia (Himalayan countries, Further India, Malaya and Indo-Australian archipelago) is presented. The changes of the current system are discussed in annotations. The following genus taxa are described as new: *Loosjesia* gen. nov. (type species *Clausilia cambojensis* L. PFEIFFER), *Cylindrophaedusa* (*Montiphaedusa*) subgen. nov. (*Clausilia ioes* BENSON), *Dautzenbergiella* (*Mansuyia*) subgen. nov. (*Clausilia mansuyi* DAUTZENBERG & FISCHER), *Hemiphaedusa* (*Dendrophaedusa*) subgen. nov. (*Clausilia lemyrei* BAVAY & Dautzenberg), *Juttingia* (*Pseudohemiphaedusa*) subgen. nov. (*Hemiphaedusa excurrens* LOOSJES, non MARTENS). The following species is described as new: *Hemiphaedusa (Selenophaedusa) bavayi* spec. nov. For *Hemiphaedusa excurrens* LOOSJES, non MARTENS, a replacement name is given: *Juttingia loosjesi* nom. nov.

(2002g): Revision of the Garnieriinae (Gastropoda: Stylommatophora: Clausiliidae), with descriptions of new taxa. — Stuttgarter Beiträge zur Naturkunde(Ser. A), Nr. 640: 23 S..

The subfamily Garnieriinae of the family Clausiliidae which is distributed with 21 known species in South East Asia is systematically revised. The following taxa are described as new: *Tropidauchenini* n. trib., *Tropidauchenia* (*Neniauchenia*) n. subgen., *Garnieria saurini* n. sp., *Tropidauchenia (Neniauchenia) amoena* n. sp., *T. (Grandinenia) cinderella* n. sp., *T. (Indonesia) excellens* n. sp., *T. (T.) donggiaoensis* n. sp., *T. (T.) fischeri* n. sp., *Garnieria mouhoti moellendorffii* n. ssp..

(2002h): *Albinaria* taxa (Gastropoda: Pulmonata: Clausiliidae) on Folegandros island (Cyclades, Greece), subspecies or species? — In: FALKNER, M., GROH, K. & SPEIGHT, M. C. D. (Hrsg.), Collectanea Malacologica: 291-299, 2 text-pls..

The *Albinaria* taxa from Folegandros island (Cyclades, Greece) are described. Three taxa occur on the island, including *A. caerulea caerulea* (Deshayes) with smooth and weakly ribbed forms. Two strongly ribbed taxa are described as new: *A. caerulea pholegandrica* n. ssp. and *A. c. scaletta* n. ssp. All taxa occur sympatrically or parapatrically with other taxa apparently without transitional forms.

(2002i): The Rillyini species (Gastropoda: Pulmonata: Clausiliidae) from the Paleocene of the Paris basin. — In: FALKNER, M., GROH, K. & SPEIGHT, M. C. D. (Hrsg.), Collectanea Malacologica: 343-361, 5 text-pls..

The Rillyini (*Rillya*, *Neniopsis* species) from the Late Paleocene of the Paris basin are revised, based on material in the Staadt collection. Classification of the *Rillya* group as belonging to the Clausiliidae is validated, by demonstration that one species has a clausilium. The following taxa are described as new: *Pararillya* n. gen. (type species: *Pupa columellaris* MICHAUD), *Rillyella* n. gen. (type species: *Rillyella chenayensis* n. sp.), *Neniopsis coessmanni* n. sp., *Rillya uva* n. sp., *Rillyella chenayensis* n. sp. All of these new species are from Paleocene deposits at Chenay near Reims.

Attention is drawn to the existence of further taxa which are assumed to be new species, but which are not named due to inadequacy of the available material.

**(2003a): New zaptychoid Phaedusinae from Taiwan (Gastropoda: Stylommatophora: Clausiliidae). — Archiv für Molluskenkunde, 132 (1/2): 105-119, 2 pls..**

With this paper a revision of the zaptychoid Phaedusinae (Clausiliidae) from Taiwan is presented. The following species taxa are described as new: *Hemipahedusa* (*Hemizaptyx*) *ilanensis* n. sp., *H. (H.) montuosa* n. sp., *Thaumatoptyx alloptyx* n. sp., *T. aptyx* n. sp., *T. changi* n. sp., *T. euptyx* n. sp., *T. gonyptyx* n. sp., *T. oligoptyx* n. sp., *T. orthoptyx* n. sp., *T. paraptyx* n. sp., *T. ypsilonptyx* n. sp.

**(2003b): Systematic and nomenclatural notes on Phaedusinae with the description of new taxa (Gastropoda: Stylommatophora: Clausiliidae). — Archiv für Molluskenkunde, 132 (1/2): 121-141, 3 pls..**

In the systematic part of this paper new genus and species taxa of Phaedusinae (Clausiliidae) mainly from China and Vietnam are described. Systematic remarks on *Prozaptyx* LOOSJES, *Reinia* KOBELT and *Pauciphaedusa* MINATO & HABE are made. The species from mainland China described by CHEN et al. (cf. CHEN & ZHANG 1999) are identified and classified. The following genus taxa are described as new: *Euphaedusa* (*Dentiphaedusa*) n. subgen. (type species *Clausilia spinula* HEUDE), *E. (Papilliphaedusa)* n. subgen. (*Clausilia lorraini* MENKE), *E. (Tauphaedusa)* n. subgen. (*Clausilia tau* O. BOETTGER), *E. (Telophaedusa)* n. subgen. (*Clausilia filippina* HEUDE), *Oospira* (*Formosanella*) n. subgen. (*Clausilia bensoni* H. ADAMS), *O. (Paraformosana)* n. subgen. (*Clausilia phyllostoma* HEUDE). The following species taxa are described as new: *Bathyptychia* (*B.*) *mira* n. sp., *Euphaedusa* (*E.*) *minatoi* n. sp., *Hemiphaedusa* (*Hemizaptyx*) *pumilio* n. sp., *Hemiphaedusa* (*Synprosphyma*) *duplex* n. sp., *Oospira* (*Formosana*) *telum* n. sp., *Oospira* (*O.*) *antiboudah* n. sp., *Oospira* (*O.*) *tetraptyx* n. sp., *Phaedusa* (*P.*) *sorella* n. sp., *Phaedusa* (*P.*) *subgranulosa* n. sp., *Reinia* (*R.*) *changi* n. sp., *Thaumatoptyx?* *mirabilis* n. sp., *Bathyptychia* (*B.*) *beresowskii* *delicata* n. subsp., *Euphaedusa* (*E.*) *lunanensis* *acutissima* n. subsp., *Phaedusa* (*Metaphaedusa*) *pseudobensoni* *aberrans* n. subsp., *Serriphaedusa* *draesekei* *caviphila* n. subsp. In the nomenclatural notes the following new replacement names are given: *Dautzenbergiella* (*Mansuyiella*) nom. nov. for *D. (Mansuyia)* H. NORDSIECK 2001 [non SUN 1925]; *Tyrannophaedusa moellendorffi* nom. nov. for *Clausilia aurantiaca* var. *erberi* MÖLLENDORFF 1885 [non FRAUENEFELD 1867].

**(2003c): *Macrogaster mellae* (STABILE) und *M. badia* (C. PFEIFFER), zwei ungenügend bekannte Macrogaster-Arten (Gastropoda: Stylommatophora: Clausiliidae). — Mitteilungen der deutschen malakozoologischen Gesellschaft, 69/70: 61-69.**

In the first part of this paper *Macrogaster* (*Pyrostoma*) *mellae* (STABILE 1864) from the Cottian and Maritime Alps is separated as an independent species from *M. (P.) attenuata* (ROSSMÄSSLER 1835). The intraspecific variability of this species is examined. In the second part the subspecies division of *M. (P.) badia* C. PFEIFFER (1828) which was proposed by KLEMM (1969) is revised. The forms of this species which may have subspecific rank are characterized. A part of the species range in the western Alps which until now was unknown is reported on.

**(2004a): *Albinaria cretensis* group: definition of the species and subspecies, with the description of new taxa (Gastropoda, Pulmonata, Clausiliidae). — Basteria, 68: 51-70.**

The valid species taxa of the *Albinaria cretensis* group sensu NORDSIECK (1977) are defined, and their types, as far as available, are figured. Distributional data of the taxa and arguments for the proposed classification are given. The following taxa are described as new: *Albinaria eburnea inflaticollis* subsp. nov., *A. e. samariae* subsp. nov., *A. troglodytes niproensis* subsp. nov., *A. virginea gavdopoulensis* subsp. nov., *A. v. gavdosensis* subsp. nov., and *A. v. litoralis* subsp. nov.

**(2004b): Türkische Clausiliidae, III: Neue Arttaxa der Unterfamilien Alopiinae und Mentisoideinae aus Anatolien (Gastropoda: Stylommatophora). — Stuttgarter Beiträge zur Naturkunde(Ser. A), Nr. 670: 28 S..**

The following new species taxa of Turkish Clausiliidae are described: *Galeata amanica* n. sp., *Kazancia liebegotti* n. sp., *Phrygica ilegiensis* n. sp., *Sprattia aksuensis* n. sp., *S. pseudophrygica* n.

sp., *Albinaria inauris syedra* n. subsp., *A. myrensis liebegotti* n. subsp., *Phrygica raehlei pygmaea* n. subsp., *P. riedeli orientalis* n. subsp., *Sprattia aksuensis barlaensis* n. subsp., *S. beycola medoroides* n. subsp., *S. blissi subaai* n. subsp., *S. blissi yalvacensis* n. subsp., *S. sillyonensis candirensis* n. subsp., *S. sowerbyana dolium* n. subsp., *S. sowerbyana princeps* n. subsp. The major part of the genus *Sprattia* is revised. Additionally a cave form of *Dobatia goettingi* (BRANDT, 1961) is described.

**(2005a): New taxa of Phaedusinae and Garnieriinae from mainland China and Taiwan (Gastropoda: Stylommatophora: Clausiliidae). — Archiv für Molluskenkunde, 134 (1): 23-52, 1 pl..**

In the present paper new genus and species taxa of Phaedusinae and Garnieriinae (Clausiliidae) from mainland China (mainly Guangxi) and Taiwan are described. The new taxa from mainland China are the following: Phaedusinae: *Miraphaedusa* n. gen. (type species *Miraphaedusa takagii* n. sp.), *Hemiphaedusa (Notoptychia) media* n. sp., *H. (N.) polydonella* n. sp., *H. (Dendrophaedusa) spinifera* n. sp., *Miraphaedusa takagii* n. sp., *Oospira (Atractophaedusa) ookuboi* n. sp., *O. (A.) takagii* n. sp., *O. (Formosana) splendens* n. sp., *Bathyptychia (B.) beresowskii flava* n. subsp., *Phaedusa (Metaphaedusa) pallidocincta* *ookuboi* n. subsp.; Garnieriinae: *Tropidauchenia (Grandinenia) capreolus* n. sp., *T. (G.) costigera* n. sp., *T. (G.) gastrum* n. sp., *T. (G.) ookuboi* n. sp., *T. (G.) pseudofuchsi* n. sp., *T. (G.) fuchsii amabilis* n. subsp., *T. (G.) gastrum densecostulata* n. subsp., *T. (G.) gastrum laticosta* n. subsp., *T. (G.) takagii rubens* n. subsp.. The description of *Oospira (Atractophaedusa) antibouddah* (H. NORDSIECK) from Tonkin, Vietnam is completed. Further species taxa until now only known from Vietnam are reported from Guangxi. The following taxa from Taiwan are described as new: *Hemiphaedusa (Hemizaptyx) hemmeni* n. sp., *H. (H.) longiplicata* n. sp., *Thaumatoptyx costellata* n. sp., *Hemiphaedusa (Hemizaptyx) antuensis chichiensis* n. subsp., *H. (H.) hemmeni yucola* n. subsp., *Thaumatoptyx gonyptyx lacuphila* n. subsp., *T. uranisoptyx diploptyx* n. subsp.. *H. (H.) kosakai* KURODA is regarded as an independent species, *H. (H.) takkiriensis* Chang as a synonym of this species.

**(2005b): Systematics of the Mentissoideinae (Gastropoda: Stylommatophora: Clausiliidae). — Archiv für Molluskenkunde, 134 (1): 53-64.**

In this paper a systematic list of the subfamily Mentissoideinae (Clausiliidae) is presented. The taxa above species level are defined. The diagnoses make possible phylogenetic hypotheses concerning the groups within the subfamily and their relations. The relationships of the Clausiliinae and Baleinae to the Mentissoideinae are also discussed.

**(2005c): New South American Clausiliidae from the collections of the Florida Museum of Natural History (Gastropoda, Clausiliidae, Neniinae). [NEUBERT, E. & NORDSIECK, H.]. — Bulletin of the Florida Museum of Natural History, 45 (2): 45-62.**

The material described here contains 32 taxa of Neniinae. The following new genus is described: *Brevinenia* n. gen. The following species or subspecies are new to science: *Bequaertinenia delicata* n. sp., *Columbinia (Steatonenia) pachygastris* n. sp., *Cyclonenia albostaturalis* n. sp., *Cyclonenia gibber* n. sp., *Cylindronenia violacea* n. sp., *Hemicena polinskiana ancashensis* n. ssp., *Incaglaia leucostoma* n. sp., *Incania papillosa papillosa* n. sp. n. ssp., *Incania papillosa imbecilla* n. ssp., *Incania platystoma* n. sp., *Steeriana cajamarcana sororminor* n. ssp., *Steeriana sorormajor* n. sp., *Temesa gradata* n. sp., *Temesa pilsbryi perfectecostata* n. ssp., *Zilchiella palatalis* n. sp., *Zilchiella scala* n. sp. All species except *Incaglaia huanucensis* were found to live in areas dominated by limestone substrate. Several species seem to persist even when the vegetation type changed due to human activities.

**(2005d): Revision of the system of the Peruvian Neniinae (Gastropoda: Stylommatophora: Clausiliidae), with description of new taxa. — Archiv für Molluskenkunde, 134 (2): 197-221, 3 pls..**

In the present paper the system of the Peruvian genera of the subfamily Neniinae (Clausiliidae) is revised. The South American Neniinae are separated as a tribe: Peruiniini n. trib.. Three genus and several species taxa of the Neniinae from northern Peru are described as new: *Andiniastra* n. gen. (type species: *A. violascens* n. sp.); *Incaglaia (Leuconenia)* n. subgen. (*I. leucostoma* Neubert & Nordsieck); *Sympychiella (Divanenia)* n. subgen. (*S. (D.) elegantissima* n. sp.); *Andiniastra violascens* n. sp.; *Columbinia (C.) convexivolvis* n. sp.; *Columbinia (Steatonenia) ehrmanni* n. sp.;

*Cyclonenia hemmeni* n. sp.; *Gracilinenia nitens* n. sp.; *Neniella strictecostata* n. sp.; *Steeriana nivea* n. sp.; *Sympychiella* (S.) *bilamellata* n. sp.; *S. (Divanenia) elegantissima* n. sp.; *Temesa gibbosula* n. sp.; *Andiniella flammulata unicolor* n. subsp.; *Cyclonenia gibber sagasteguii* n. subsp.; *Cylindronenia pangamitoensis pongoensis* n. subsp.; *Steeriana cajamaricana solutilabrum* n. subsp.; *Temesa latestriata densestriata* n. subsp..

- (2005e): **Family Clausiliidae – general information, systematic position, subdivision, evolution (Gastropoda: Stylommatophora).** — *Mitteilungen der deutschen malakozoologischen Gesellschaft*, 73/74: 17-28.

In the present paper basic informations on the family Clausiliidae are given. They concern the features of the family in general, its systematic position within the Stylommatophora, the subdivision into subfamilies and main processes of its evolution.

- (2005f): **Mating biology of Clausiliidae (Gastropoda: Stylommatophora).** — *Mitteilungen der deutschen malakozoologischen Gesellschaft*, 73/74: 29-34.

The mating biology of several species of Clausiliidae was examined. It resulted that in this family reciprocal as well as non-reciprocal copulation occurs, the latter, depending on the group, with different modes and differently long durations. The copulation of some well-examined species is described.

- (2005g): **Diversity of the genus *Cochlodina* FÉRUSSAC in Slovenia and Croatia (Gastropoda: Stylommatophora: Clausiliidae).** — *Mitteilungen der deutschen malakozoologischen Gesellschaft*, 73/74: 35-40.

The *Cochlodina* species of Slovenia (with adjacent Venezia Giulia) and Croatia exhibit a remarkable diversity which in the past led to confusion in the systematics and to nomenclatural mistakes. Therefore, a critical revision of the respective literature is the prerequisite for a successful study of the group. The main problems to be solved by this study are the relationships within the taxa complexes of *Cochlodina laminata* and *C. costata*.

- (2006a): **Systematics of the genera *Macrogastera* HARTMANN 1841 and *Julica* NORDSIECK 1963, with the description of new taxa.** — *Archiv für Molluskenkunde*, 135 (1): 49-71, 9 figs., 2 tabs., 2 pls..

The genera *Macrogastera* HARTMANN 1841 and *Julica* H. NORDSIECK 1963 are revised, especially what concerns the relationships of the species and their subspecies division. The following subspecies are described as new: *Macrogastera (Pyrostoma) badia alpina* n. subsp., *M. (P.) plicatula amiatensis* n. subsp., *M. (P.) plicatula aprutica* n. subsp., *Julica schmidii sigridae* n. subsp. For *M. (M.) ventricosa nana* (BRANCSIK 1890) [non SCHOLTZ 1843] the new replacement name *M. (M.) ventricosa brancsiki* nom. nov. is proposed.

- (2006b): **Changes in the systematics and nomenclature of European Clausiliidae (Gastropoda: Stylommatophora).** — *Mitteilungen der deutschen malakozoologischen Gesellschaft*, 75: 9-13.

In the present paper changes in the systematics and nomenclature of the European Clausiliidae which are recorded in the CLECOM-checklists (FALKNER & al. 2001, BANK & al. 2001a) are proposed.

- (2006c): **Clausiliidae of China - a survey on a fascinating group of land snails (Gastropoda, Stylommatophora, Clausiliidae).** — *Club Conchylia Informationen*, 38 (1/2): 12-21, 2 text-figs., pls. 3-5.

In this paper a survey on the Clausiliidae of mainland China is presented. As a help for determination, the genera and higher taxa are characterized, and selected species of the genera are figured. The genus taxa are listed, with informations on distribution and species numbers. The composition of some well-known regional clausiliid faunae of China is given.

- (2007a): **Worldwide door snails (Clausiliidae), recent and fossil.** — 214 S., 20 pls., Hackenheim (ConchBooks).

The book contains updated articles on the land snail family Clausiliidae and lists of its valid taxa (chapter II, IX), parts of which have already been published in the last decades. The respective

articles either give general information on the family (I) or deal with special biological and palaeontological aspects, which are especially interesting, such as evolution and development of the closing apparatus (IV, V), subspecies evolution and hybridization (VI), mating biology (VIII) and fossil record and its changes in the Tertiary and Quaternary (X, XI). In other articles problems in systematics and phylogeny of certain clausiliid groups (III, VII) are discussed. A chapter on practical work with Clausiliidae (XII) is also included. Coloured illustrations of the shells of representative species of all clausiliid groups give a survey of the diversity of the group and can serve as a basis for determination. In addition to this, the book contains the description of several (45) new taxa on tribe, genus and species level.

- (2007b): Neue Unterarten von *Cochlodina costata* (C. PFEIFFER, 1828) (Gastropoda, Stylommatophora, Clausiliidae, Alopiinae). — Club Conchylia Informationen, 38 (3/4): 5-9, 11 figs..

In this paper the following subspecies of *Cochlodina costata* (C. PFEIFFER, 1828) are described as new: *C. costata istracosta* n. subsp., *C. c. naticonensis* n. subsp., *C. c. schmidti* n. subsp., *C. c. sigridae* n. subsp.

- (2007c): New taxa of Phaedusinae and Garnieriinae from southern China. — Archiv für Molluskenkunde, 136 (2): 217-243, 1 fig., 5 pls..

In the present paper the following species taxa of Clausiliidae from China are described as new: Phaedusinae: *Dautzenbergiella* (D.) *chinensis* n. sp., *Euphaedusa* (*Papillipheda*) *yongshuae* n. sp., *E. (Telophaedusa)* *ishibei* n. sp., *Hemiphaedusa* (*Margaritiphadusa*) *macroptychia* n. sp., *H. (Selenophaedusa)* *ooharai* n. sp., *Oospira* (*Formosana*) *kongshanensis* n. sp., *O. (F.) moschinella* n. sp., *O. (F.) ooharai* n. sp., *O. (F.) umbrosa* n. sp., *Serriphaedusa* *ookuboi* n. sp., *Dautzenbergiella* (*Mansuyiella*) *mansuyi* *ootanii* n. subsp., *Oospira* (*Siphonophaedusa*) *grangeri asiphonia* n. subsp., *Phaedusa* (*P.*) *lyra* *latestriata* n. subsp., *Synprosphyma* (*S.*) *basilissa planicollis* n. subsp.; Garnieriinae: *Grandinenia rex* n. sp., *Tropidauchenia* (*T.*) *hitomiae* n. sp., *T. (T.) lucida* n. sp., *T. (T.) nakaharai* n. sp., *T. (T.) napoensis* n. sp., *T. (T.) ootanii* n. sp., *Grandinenia ookuboi* *pulchricosta* n. subsp., *G. takagii* *gigas* n. subsp., *Tropidauchenia* (*T.*) *hitomiae rufescens* n. subsp., *T. (T.) lucida gracillima* n. subsp., *T. (T.) orientalis rufocincta* n. subsp.

- (2007d): *Cochlodina laminata* (MONTAGU 1803) – polytypic in genital morphology (Gastropoda: Stylommatophora: Clausiliidae). — Mitteilungen der deutschen malakozoologischen Gesellschaft, 77/78: 23-25.

The genital morphology of *Cochlodina laminata* MONTAGU from central Europe and other parts of its range has been investigated. It results that the species comprises several geographical forms which differ in the measurements of their copulatory organs.

- (2007e): *Balea* GRAY 1824 and *Alinda* H. & A. ADAMS 1855 are separated as genera (Gastropoda: Stylommatophora: Clausiliidae). — Mitteilungen der deutschen malakozoologischen Gesellschaft, 77/78: 27-30, 2 figs.

Because of the differences in the male copulatory organs *Balea* GRAY 1824 and *Alinda* H. & A. ADAMS 1855 are separated as genera.

- (2008a): *Alinda biplicata* (MONTAGU) and *Laciaria plicata* (DRAPARNAUD), diversity in comparison, with the description of new subspecies (Gastropoda: Stylommatophora: Clausiliidae). — Archiv für Molluskenkunde, 137 (2): 133-157, 2 figs., 5 pls..

*Alinda biplicata* (MONTAGU 1803) and *Laciaria plicata* (DRAPARNAUD 1801) and related species are revised, using shell characters. The differentiating characters of the species and the species classification and the distributional relationships within the respective species complexes are discussed. The diversity of the species complexes is described and shown by figures, and an overview of the respective taxa is given. The following subspecies are described as new: *Alinda biplicata byshekensis* n. subsp., *A. b. faueri* n. subsp., *A. b. irikovi* n. subsp., *A. b. orientalis* n. subsp., *A. elegantissima pirotana* n. subsp., and *Laciaria plicata rhodopensis* n. subsp.. For *L. plicata costata* (KIMAKOWICZ 1883) [non C. PFEIFFER] the new replacement name *L. p. costigera* n. nov. is proposed.

**(2008b): The system of the genus *Aloia* H. & A. ADAMS 1855 (Gastropoda: Stylommatophora: Clausiliidae). — Mitteilungen der deutschen malakozoologischen Gesellschaft, 79/80: 7-18, 3 figs..**

In the present paper the system of the genus *Aloia* H. & A. ADAMS is revised. It contains 1. remarks on the phylogeny within the genus; 2. the system of the species and subspecies with information on their distribution; 3. a list of the species-group taxa (with examined types); 4. data on the L-R-species pairs on their syntopic occurrences.

**(2009a): Revisory notes on the genus *Montenegrina* O. BOETTGER 1877 and description of new taxa. — Archiv für Molluskenkunde, 138 (1): 71-87, 1 map, 2 pls..**

In this paper a revised list of the species taxa of the genus *Montenegrina* O. BOETTGER 1877 is published. The taxonomical characters relevant for the species classification are enumerated, and changes of the previous classification are proposed. The following species taxa are described as new: *Montenegrina dedovi* n. sp., *M. dedovi lakmosensis* n. ssp., *M. perstriata mavrovensis* n. ssp., *M. p. tenebrosa* n. ssp. and *M. skipetarica robusta* n. ssp.

**(2009b): Ergänzungen der Revision der Gattung *Medora* H. & A. ADAMS, mit Beschreibungen neuer Taxa (Gastropoda, Stylommatophora, Clausiliidae, Alopiinae). -- Conchylia, 40 (1/2): 2-10, 13 figs..**

Diese Arbeit ist eine Ergänzung der Revision des Genus *Medora* (NORDSIECK, 1970) für die Arten der dinarischen Länder. Zwei Arttaxa werden neu beschrieben: *Medora adensameri* n.sp., *M. macascarensis siriae* n. subsp. Zu einigen wenig bekannten Arttaxa werden genauere Angaben gemacht.

**(2010): New taxa of the subfamilies Neniinae and Garnieriinae (Gastropoda: Stylommatophora: Clausiliidae). — Archiv für Molluskenkunde, 139 (1): 45-69, 5 figs., 4 pls..**

In the present paper the knowledge of the subfamilies Garnieriinae and Neniinae (Clausiliidae) is increased by the description of one new genus and several new species taxa. These taxa are the following: Garnieriinae: *Ptychauchenia* n. gen. (type species: *P. panhai* n. sp.); *Grandinenia pallidissima* n. sp.; *Neniauchenia tonkinensis* n. sp.; *Ptychauchenia panhai* n. sp.; Neniinae: *Columbinia* (C.) *elegans* n. sp.; C. (C.) *elegantula* n. sp.; C. (C.) *marcapatensis* n. sp.; C. (*Steatonenia*) *hemmeni* n. sp.; *Neniella macrosoma* n. sp.; *Pseudogracilinenia pulchricosta* n. sp.; *Sympychiella* (S.) *acuminata* n. sp.; S. (S.) *fratermajor* n. sp.; *Incaglaia* (I.) *angrandi soukupi* n. subsp.; I. (I.) *a. variegata* n. subsp.; *Parabalea bicolor undaticosta* n. subsp.; *P. gibbulosa grisea* n. subsp.; *P. latestriata queroensis* n. subsp.; *P. parcecostata meridionalis* n. subsp.; *Peruinia peruana erythrostoma* n. subsp.; *Pseudogracilinenia pulchricosta lamellicosta* n. subsp.; *Sympychiella* (S.) *bilamellata costulata* n. subsp.; S. (S.) *b. gracilicosta* n. subsp.; S. (S.) *b. laevigata* n. subsp.

**(2011a): Revision of the genus *Leucostigma* A. J. WAGNER 1919 (Gastropoda: Stylommatophora: Clausiliidae). — Archiv für Molluskenkunde, 140 (1): 123-147, 4 pls..**

In this paper a revision of the genus *Leucostigma* A. J. WAGNER 1919 based mainly on shell morphology is published. It contains only one species, *L. candidescens* (ROSSMÄSSLER 1835), which is distributed in central and southern Apennine Italy. The species is subdivided into nine subspecies: *Leucostigma candidescens candidescens*, *Leucostigma candidescens convertita* (FLACH 1907), *Leucostigma candidescens dextromira* n. ssp., *Leucostigma candidescens leucostigma* (ROSSMÄSSLER 1836), *Leucostigma candidescens megachilus* (PAULUCCI 1881), *Leucostigma candidescens paraconvertita* n. ssp., and *Leucostigma candidescens samnitica* (ROSSMÄSSLER 1842). Three of these subspecies, *Leucostigma candidescens convertita*, *Leucostigma candidescens dextromira* n. ssp. and *Leucostigma candidescens paraconvertita* n. ssp., are dextral counterparts of certain normally (left-) coiled subspecies. The high diversity within the species is described and discussed.

**(2011b): Beschreibung einer neuen *Cochlostoma*-Art aus Italien, mit revisorischen Bemerkungen zu den *Cochlostoma*-Arten der Apenninen-Halbinsel (Gastropoda, Caenogastropoda, Architaenioglossa, Cochlostomatidae). — Conchylia, 41 (3-4): 13-21, 17 figs..**

In this paper a new species of the genus *Cochlostoma* JAN from Gran Sasso d'Italia, central Italy, is described: *C. mariannae* n. sp. For the definition against the other *Cochlostoma* species from the Apennine Peninsula a revision of these species was necessary; its results are summarized in revisory remarks attached to the description of the new species.

**(2011c): Murellen von Mittel-und Südalien (Gastropoda, Stylommatophora, Helicidae) bestimmen, eine schwierige Aufgabe. — Conchylia, 41 (3-4): 22-32, 23 figs.**

The problems with the determination of *Marmorana* species collected in central and southern Italy are discussed in this paper.

**(2012a): Ergänzung der Revision der Gattung *Medora* H. & A. ADAMS: Die *Medora*-Arten Italiens (Gastropoda, Stylommatophora, Clausiliidae, Alopiinae), mit Beschreibung einer neuen Unterart von *Medora dalmatina* ROSSMÄSSLER. — Conchylia, 42 (1-4): 75-81, 9 figs..**

Diese Arbeit ist eine weitere Ergänzung der Revision des Genus *Medora* (NORDSIECK 1970) für die Arten Italiens. Eine Unterart von *Medora dalmatina* (ROSSMÄSSLER 1835) von Kalabrien wird neu beschrieben: *M. dalmatina pollinensis* n. subsp. Die Verbreitung des Genus in Italien wird diskutiert.

**(2012b): Clausiliidae of Guangxi, southern China (Gastropoda, Pulmonata, Stylommatophora). — Acta Conchyliorum, 12: 3-55, 5 text-figs., 13 pls.**

The present paper is an iconography of the known clausiliid species of the province of Guangxi, southern China. It contains a list of the species and subspecies, with systematical annotations, and a zoogeographical analysis of the fauna. Nearly all species taxa are figured; most of the figured specimens are types. The following genus and species taxa are described as new: Phaedusinae: *Nannophaedusa* n. gen. (type species: *Nannophaedusa acicula* n. sp.); *Acanthophaedusa gemmulata* n. sp.; *Hemiphaedusa (Margaritophaedusa) whitteni* n. sp.; *H. (Selenophaedusa) castanea* n. sp.; *H. (S.) princeps* n. sp.; *Nannophaedusa acicula* n. sp.; *Miraphaedusa (M.) pretiosa* n. sp.; *Oospira (Distortiphaedusa) coffea* n. sp.; *O. (Formosana) elegans* n. sp.; *O. (F.) malleolata* n. sp.; *Synprosphyma (S.) occulta* n. sp.; *Euphaedusa (E.) loczyi uniplicata* n. subsp.; *Hemiphaedusa (Selenophaedusa) spinifera hechiensis* n. subsp.; *Oospira (Distortiphaedusa) zhaoyifani sigridae* n. subsp.; *Phaedusa (P.) lypra duanensis* n. subsp.; Garnieriinae: *Grandinenia ignea* n. sp.; *G. magnilabris* n. sp.; *G. puella* n. sp.; *G. unicolor* n. sp.; *G. yulinensis* n. sp.; *G. fuchsi pseudotigris* n. subsp.; *G. maroskoi gigantea* n. subsp.; *G. pallidissima albescens* n. subsp.; *G. pseudofuchsi nigrofasciata* n. subsp.; *G. p. remota* n. subsp.; *G. p. varicolor* n. subsp.; *Tropidauchenia dorri adusta* n. subsp.; *T. d. adustella* n. subsp.

**(2012c): Note on Garnieriini (Gastropoda, Stylommatophora, Clausiliidae, Garnieriinae). — Acta Conchyliorum, 12: 57-61, 4 text-figs., 1 pl..**

In this paper the following taxa of the subfamily Garnieriinae, tribe Garnieriini, are described as new: *Progarnieria* n. gen. (type species: *Garnieria huleschheliae* GREGO & SZEKERES 2011); *Garnieria mouhoti yunnancola* n. subsp.

**(2012d): Check-list of the Clausiliidae of mainland China (Gastropoda, Stylommatophora). — Acta Conchyliorum, 12: 63-73.**

The present paper contains a check-list of the Clausiliidae of mainland China, with genus diagnoses. In this list the genera of the two subfamilies, Phaedusinae and Garnieriinae, are characterized by shell morphology, and the species (with subspecies), with information on their distribution (provinces), are listed. A list of synonyms is added for each subfamily. For the speciose subfamily Phaedusinae a survey on the distribution of the genera within China is given.

**(2013a): Beschreibung einer neuen *Clausilia*-Unterart (Gastropoda, Pulmonata, Clausiliidae) von den Bergamasker Alpen (Italien), mit revisorischen Bemerkungen zur Untergattung *Clausilia (Strobeliella)*. — Conchylia, 43 (1-4): 51-58.**

In this paper a *Clausilia* taxon from the surroundings of the Presolana mountain, Bergamasque Alps, Italy, is described as new. *Clausilia (Strobeliella) brembina alanica* n. subsp. The revision of the *Clausilia whateliana* group [= *C. (Strobeliella) H. NORDSIECK*] is continued by remarks on the systematics and distribution of the species.

(2013b): **Comment on *Turbo bidens* LINNAEUS, 1758 (Gastropoda, Clausiliidae): request for setting aside the neotype (Case 3581).** — Bulletin of Zoological Nomenclature, 70 (1): 43-45.

(2013c): **Fossil Clausiliidae from Ceresole d'Alba (Piedmont; Middle Pliocene), with remarks on Triptychia (Filholiidae) and the Helicoidea from the same site (Gastropoda: Stylommatophora).** — Archiv für Molluskenkunde, 142 (1): 167-180, 25 figs.

In this paper the Clausiliidae of the Middle Pliocene site Ceresole d'Alba (Cuneo province, Piedmont, Italy) are described. The clausiliid fauna comprises eight species, five of them available as complete shells and (or) apertural fragments, three only as apical fragment and thus not determinable as species. The following genus and species taxa are described as new: *Neostyriaca* (*Lombardiella*) n. subgen., *Parafusulus* (*Plio**fusulus* n. subgen.), *Clausilia* (C.) *ceresolensis* n. sp., *Neostyriaca* (*Lombardiella* n. subgen.) *prostrobeli* n. sp., *Parfusulus* (*Plio**fusulus* n. subgen.) *latestriatus* n. sp. The systematic problems round the clausiliid species are discussed. Zoogeographical and ecological remarks on the clausiliid fauna are added. Besides, annotations on the *Triptychia* species (Filholiidae) and the helicoid fauna of Cersole d'Alba are given.

(2013d): **Delimini (Gastropoda, Pulmonata, Clausiliidae) from Apennine Italy, with the description of three new subspecies from Calabria.** — Conchylia, 44 (1-2): 3-14.

In this paper a survey of the species of the tribe Delimini (Clausiliidae, Alopiinae) from the Apennine Italy (except *Charpentieria itala*) is given (chapter I), and the distribution of these species in Calabria is summarized (II). The following subspecies from Calabria are described as new (III): *Siciliaria (Stigmatica) vulcanica sigridae* n. subsp., *Papillifera solida diabolina* n. subsp., *P. s. pseudobidens* n. subsp.

(2013e): **A new species of the genus *Alopia* H. & A. ADAMS (Gastropoda, Pulmonata, Clausiliidae) from Lotru valley, southern Carpathians, Romania.** — Mitteilungen der deutschen Malakozoologischen Gesellschaft, 89: 1-6.

In this paper a new species of the genus *Alopia* H. & A. ADAMS (Clausiliidae, Alopiinae) from Lotru valley, southern Carpathians, Romania, is described: *A. hirschfelderi* n. sp.

(2013f): **Die Entdeckung einer neuen *Oospira*-Art im südthailändischen Regenwald (Clausiliidae, Phaedusinae).** [NORDSIECK, H. & RÄHLE, W.]. — Mitteilungen der deutschen Malakozoologischen Gesellschaft, 89: 39-42.

In this paper, a hitherto unknown species of the genus *Oospira* Blanford 1872 (Clausiliidae, Phaedusinae), is described: *Oospira raehlei* n. sp. A single specimen was found together with other molluscan remains during archeological excavations in the rainforests of Southern Thailand, Trang province, in Late Holocene deposits. Search for living animals was unsuccessful.

(2013g): **Clausiliidae from the Villafranchian site Monte Serampoli (Lower Valdarno, Tuscany, Italy) (Gastropoda: Pulmonata: Stylommatophora).** — Archiv für Molluskenkunde, 142 (2): 237-244, 11 figs..

In this paper the Clausiliidae of the Villafranchian site Monte Serampoli (Lower Valdarno, Tuscany, Italy) are described. The clausiliid fauna comprises six species, five of them available as complete shells and (or) apertural fragments, one only as apical fragment and thus not determinable as species. The following species taxa are described as new: *Cochlodina (Procochlodina) esuae* n. sp., *Pravispira italiana* n. sp., *Serrulella zanchettai* n. sp., *Serruluna pisana* n. sp. Remarks to the land snail fauna and its age and to the particularities of the clausiliid fauna are added. The fauna is of Late Pliocene age.

(2013h): ***Clausilia umbrosa gardonensis* n. ssp.: a new taxon of the subgenus C. (*Strobeliella*) H. NORDSIECK 1977 from eastern Lombardy (Gastropoda: Pulmonata: Clausiliidae).** [NARDI, G. & NORDSIECK, H.]. — Archiv für Molluskenkunde, 142 (2): 245-251, 6 figs..

In this paper a new subspecies of *C. (Strobeliella) umbrosa* (KÄUFEL 1928) from Valle d'Inzino (eastern Lombardy, northern Italy) is described: *C. u. gardonensis* n. ssp. It differs from the nominotypical subspecies by its larger shell with weaker sculpture. *C. brembina alanica* H.

NORDSIECK 2013, another taxon of *Clausilia* (*Strobeliella*) with a similar shell, differs from *C. umbrosa gardonensis* n. ssp. mainly by its genital anatomy.

(2014a): **Description of the first right-coiled taxon of Garnieriinae (Gastropoda, Pulmonata, Clausiliidae), with a synopsis of the *Tropidauchenia* group.** — *Conchylia*, 44 (3/4): 11-15, 1 pl. In this paper the first right-coiled taxon of the subfamily Garnieriinae (Clausiliidae), *Euryauchenia demangei dextroversa* n. subsp., is described. A synopsis of the *Tropidauchenia* group (Tropidaucheniini) is added.

(2014b): **Zur Systematik der Gattung *Cepaea* Held 1838 (Gastropoda, Stylommatophora, Helicidae).** — *Mitteilungen der deutschen malakozoolischen Gesellschaft*, 91: 43-52.

In this paper, the current system of the genus *Cepaea* Held 1838 is checked by a character analysis of the species. As result it is demonstrated that the genus consists of three groups which are evaluated as subgenera: *C. (Austrotachea)*, *C. (Hylotachea)* and *C. (Cepaea)*.

(2014c): **Clausiliidae from the Sarmatian site Hautzendorf (Austria: Lower Austria: Weinviertel) (Gastropoda: Stylommatophora).** — *Archiv für Molluskenkunde*, 143 (1): 33-38.

In this paper the Clausiliidae of the Sarmatian site Hautzendorf (Austria, Lower Austria, Weinviertel) are described. The clausiliid fauna comprises three species, which are available as apertural fragments, and apertural fragments of two or three species. The following species taxa are described as new: *Constricta sarmatica* n. sp., *Macrogaster (M.) reischuetzi* n. sp., *M. (M.) voesendorfensis hautzendorfensis* n. subsp. Additionally, fragments of a *Triptychia* species (Filholiidae) are present. The fauna is of Middle Miocene age.

(2014d): **The genus *Albinaria* VEST in Turkey, especially the species from coastal S. W. Anatolia with adjacent Greek islands, with the description of new taxa (Gastropoda: Pulmonata: Clausiliidae).** — *Archiv für Molluskenkunde*, 143 (1): 57-67.

In this paper the revision of the genus *Albinaria* VEST from Turkey is continued. Special attention is paid to the species from coastal S. W. Anatolia and the adjacent Greek islands with corresponding fauna, which were not considered in the first part of the revision (NORDSIECK 1993). The following subspecies of the genus are described as new: *Albinaria caerulea kefalos* n. subsp., *A. freytagi insularum* n. subsp., *A. inauris hausdorfi* n. subsp., *A. i. podanii* n. subsp., and *A. munda milasensis* n. subsp. A new subspecies from the Peloponnese, *A. ithomensis raehei* n. subsp., is added.

(2014e): **Annotated check-list of the genera of fossil land snails (Gastropoda: Stylommatophora) of western and central Europe (Cretaceous - Pliocene), with description of new taxa.** — *Archiv für Molluskenkunde*, 143 (2): 153-185.

A check-list of the genera of fossil Stylommatophora from deposits of Cretaceous and Tertiary age of western and central Europe with their stratigraphic ranges is presented. The aim of this list is to provide data which are necessary for the study of phylogeny, zoogeography and faunal changes of Stylommatophora, as well as for time analyses in molecular studies of certain groups. The stratigraphic ranges were ascertained from the manual of ZILCH (1959-1960) and the papers of the following authors dealing with fossil land snails published since then. The stratigraphical nomenclature used by the older authors was adjusted to the nomenclature which is now generally accepted (International Commission on Stratigraphy 2013). The results of taxonomic revisions published after 1960 have been considered. These and the results of own investigations, based on the examination of about 200 stylommatophoran species from Tertiary, are discussed in annotations to the families within the list. The revisory remarks concern mainly some non-helicoid groups (with emphasis on Vertiginidae and Oxychilidae) and all groups of Helicoidea. The latter complete the formerly published revision of the fossil Helicoidea (NORDSIECK 1986a).

The following taxa are described as new: *Helicodontidae* (Soosiinae) n. subfam.; *Clausiliidae* (Disjunctariini) n. trib.; *Minacilla* n. gen. (Vertiginidae); *Miodiscula* n. gen. (?*Helicodontidae*); *Negulopsis* n. gen. (Vertiginidae); *Pachyretinella* n. gen. (Oxychilidae); *Palaeomastus* n. gen. (Enidae), *Paradrobacia* n. gen. (Helicidae); *Pleurodiscoides* n. gen. (Pleurodiscidae); *Protriloba* n. gen. (Clausiliidae); *Trigonopupa* n. gen. (Vertiginidae); *Leucochroopsis* (*Palaeotrichia*) n. subgen. (Hygromiidae); *Pleurodiscoides* (*Oligopleurodiscus*) n. subgen. (Pleurodiscidae); *Puisseguria*

(*Pseudelona*) n. subgen. (Elonidae); *Frechenia rhenana* n. sp. (Helicidae); *Urticicola schlickumi* n. sp. (Hygromiidae).

**(2015a): The “Cepaea” group species (Gastropoda, Pulmonata, Helicidae) from Late Oligocene and Early Miocene of the Rhine-Main region. — *Conchylia*, 45 (1-3): 17-26, 3 pls.**

In this article the “Cepaea” group species (Helicidae) from Late Oligocene and Early Miocene of the Rhine-Main region are treated. The species are described and figured, and their stratigraphic occurrences are given. The microsculpture of the species which is of importance for their differentiation is shown by SEM photos. The problems of genus and species classification are discussed. For the species *Helix subcarinata* THOMÄ 1845 [non MENKE 1828] a new replacement name is proposed: *Palaeotachea thomaeana* n. nom.

**(2015b): New species taxa of Clausiliidae (Gastropoda, Stylommatophora) from the Balkan peninsula and Turkey. — *Conchylia*, 45 (4): 3-26, 4 pls.**

Twenty-one species taxa of Clausiliidae (Alopiinae, Baleinae) from the Balkan peninsula (Montenegro, Albania, Greece) and Turkey are described as new: *Albinaria almae eftimia* n. subsp., *A. arcadica occulta* n. subsp., *A. beckmanni* n. sp., *A. brevicollis maltezana* n. subsp., *A. buresi aoos* n. subsp., *A. butoti kwanti* n. subsp., *A. confusa principalifera* n. subsp., *A. delvinensis* n. sp., *A. haussknechti mouzakiensis* n. subsp., *A. nivea grossa* n. subsp., *A. n. reuselaarsi* n. subsp., *A. schuetti serresensis* n. subsp., *A. s. miraptyx* n. subsp., *A. scopulosa acutispira* n. subsp., *A. s. echinarum* n. subsp., *Delima (D.) binotata grahovensis* n. subsp., *D. (D.) montenegrina tarensis* n. subsp., *Siciliaria (Stigmatica) pantocratoris elamellata* n. subsp., *S. (St.) pantocratoris loutrana* n. subsp., *Strigilodelima conspersa subaii* n. subsp., and *Bulgarica (B.) hemmenorum* n. sp.

**(2015c): Late Messinian continental and Lago-Mare gastropods from the Tertiary Piedmont Bassin, NW Italy. [Contribution: 31-36, pl. 6. — In: HARZHAUSER, M., NEUBAUER, T. A., GEORGOPOLOU, E., ESU, D., D'AMICO, C., PAVIA, G., GIUNTELLI, P. & CARNEVALE, G.] — *Boll. Soc. Paleont. Ital.*, 54 (1): 1-53, 7 pls.**

**Clausiliidae of Moncucco - Superfamily Clausilioidea GRAY, 1855 - Family Clausiliidae GRAY, 1855**

The clausiliid fauna of Moncucco consists of five species as follows:

Serrulininae: *Nordsieckia pontica* Lueger, 1981, *Serrulella* sp.?; Alopiinae: *Cochlodina (Miophaedusa?)* sp.; Clausiliinae: *Truciella ballecioi* (Truc, 1972), *Clausilia (C.) cf. baudoni* Michaud, 1862. A further species of Clausiliinae is indicated by apical fragments.

**(2015d): Fossil Clausilioidea (Gastropoda: Stylommatophora) in space and time, with special emphasis on Cretaceous and pre-Oligocene Cenozoic Clausiliidae. — *Archiv für Molluskenkunde*, 144 (1): 83-97.**

With this paper the insufficient knowledge of the Clausilioidea from Cretaceous and pre-Oligocene Cenozoic shall be improved, in order to supply information for the research work on the phylogeny of that superfamily. The first chapter deals with the characters and the distribution of the non-clausiliid families of the superfamily, Filholiidae and Palaeostoidae. The relations of those two families and the Clausiliidae are discussed, and the superfamily Clausilioidea is defined. In the second chapter the characters and distribution of the Clausiliidae from Cretaceous and pre-Oligocene Cenozoic are described. It is shown that the groups belonging to differ from the post-Eocene and most extant Clausiliidae by a shell with few whorls (oligogony); several subgroups are characterized by a special shell shape (oospiry). The correlation of the faunal changes of the Clausiliidae through the Cenozoic (NORDSIECK 2007) with climate changes is discussed.

**(2015e): Terrestrial and lacustrine gastropods from the Priabonian (upper Eocene) of the Sultanate of Oman. [Contribution: 26-28, fig. 11. — In: HARZHAUSER, M., NEUBAUER, T. A., KADOLSKY, D., PICKFORD, M. & NORDSIECK, H.]: — *Paläontologische Zeitschrift*, DOI 10.1007/s12542-015-0277-1: 37 pp.**

**Clausiliidae Oman - Superfamily Clausilioidea GRAY, 1855 - Family Clausiliidae GRAY, 1855**

The clausiliid fauna from the Zalumah formation of Taqah, Oman, consists of three species, two of a genus of the subfamily Eualopiinae, and one of a genus of the subfamily Laminiferinae. All

species and genera are new to science: Eualopiinae: *Omanillya* n. gen., *O. lunellifera* n. sp., *O. costellata* n. sp., Laminiferinae: *Omanifera* n. gen., *O. euclista* n. sp.

- (2015f): **Was ist *Clausilia livida* MENKE 1828 (Gastropoda, Pulmonata, Clausiliidae)?** — *Mitteilungen der deutschen malakozoologischen Gesellschaft*, **94**: 27-32.

In this paper the identity of *Clausilia livida* MENKE 1828 is discussed. As result, it is stated that the type form of *Alopia livida* is the geographic form from the lower Transylvanian parts of the Bucegi mountains, southern Carpathians, Romania.

- (2016a): **Interspecies Hybridization in the Genus *Alopia* (Gastropoda Stylommatophora, Clausiliidae) from Southern Carpathians, Romania, Demonstrated by Shell Examination.** — *Conchylia*, **46** (1-4): 3-15.

In the genus *Alopia* H. & A. ADAMS from the southern Carpathians, Romania, there are left-coiled and right-coiled taxa. In three mountains, Piatra Craiului, Bucegi and Ciucas, oppositely coiled taxa which are more or less similar = enantiomorph taxa occur together. If their closing apparatus is much different, it is possible to ascertain hybridization of these taxa by shell examination. Because DNA analysis (Fehér et al. 2013) has shown that the enantiomorph taxa at least in Piatra Craiului and Bucegi are different species, it is an interspecies hybridization. In the present paper hybridization is demonstrated for three pairs of oppositely coiled species in six localities or regions of these mountains.

- (2016b): **Three remarkable fossil Helicoidea species (Gastropoda: Stylommatophora).** — *Archiv für Molluskenkunde*, **145** (1): 125-132.

In this paper three remarkable Helicoidea species from Cenozoic are described, and their systematic position is discussed. These are the following:

I. *Lychnopsis* sp. A species from the Early Oligocene of Mallorca is described, without naming it. The genus *Lychnopsis* VIDAL is not related to the genus *Lychnus* MATHERON (Anadromidae); it is provisionally placed near to *Eurytrophe* GUDE (Elonidae).

II. *Helix aquensis* SERRES 1829. This species from the Early Miocene of southern France, which until now was classified with *Schlickumia* TRUC (Helicidae), is transferred to the genus *Galactochilus* SANDBERGER (Elonidae).

III. *Klikia altenburgensis* BINDER 1977. This species from the Early Pleistocene of Deutsch-Altenburg, Lower Austria, is assigned to the genus *Faustina* KOBELT (Helicidae, Ariantinae).

- (2016c) **New species taxa of Clausiliidae (Gastropoda, Stylommatophora) from China and Vietnam.** — *Conchylia* **47** (3-4): 37-57.

Eighteen species taxa of Clausiliidae (Phaedusinae, Garnieriinae) from China and Vietnam are described as new: Phaedusinae: *Bathyptychia* (B.) *septentrionalis* n. sp., *Hemiphaedusa* (*Margaritphaedusa*) *ptycholunella* n. sp., *Oospira* (*Formosana*) *goniostoma* n. sp., *Oospira* (*O.*) *jensi* n. sp., *Phaedusa* (P.) *percostata* n. sp., *Synprosphyma* (S.) *incrassata* n. sp., *Oospira* (*Formosana*) *antilopina antilopa* n. ssp., *Oospira* (F.) *pacifica decapitata* n. ssp., *Oospira* (F.) *splendida amphicola* n. ssp., *Oospira* (O.) *duci pentaptychia* n. ssp., *Oospira* (O.) *duci tetraptychia* n. ssp., *Oospira* (O.) *eregia christae* n. ssp., *Serriphaedusa serrata emeicola* n. ssp., *Serriphaedusa* s. *sericina* n. ssp., *Synprosphyma* (S.) *gibbosula basalifera* n. ssp.; Garnieriinae: *Grandinenia crassilabris* n. sp., *G. rutila* n. sp., *Ptychauchenia panhai euclista* n. ssp. A subspecies of *Oospira* (*Formosana*) *pacifica* (GREDLER) is described, but because lack of material not named. For *Bathyptychia apostoloma ookuboi* HUNYADI & SZEKERES, which is a *Serriphaedusa* species, a new replacement name is proposed: *Serriphaedusa ookuboi* (HUNYADI & SZEKERES 2016) [non H. NORDSIECK 2007] = *S. pseudoookuboi* nom. nov. Revising remarks on species of *Bathyptychia*, *Euphaedusa*, *Neniauchenia*, *Phaedusa*, *Synprosphyma*, and *Serriphaedusa* are made.

- (2017a) **Pulmonata, Stylommatophora, Helicoidea: systematics with comments.** — 98 pp. 2 pls. Harxheim (Conchbooks).

- (2017b) **New species taxa of the genus *Albinaria* VEST (Gastropoda, Stylommatophora, Clausiliidae) in Crete.** — *Conchylia*, **48** (1/2): 9-30, 5 pls.

Twelve subspecies of the genus *Albinaria* VEST (Clausiliidae, Alopiinae) from Crete, Greece, are described as new: *Albinaria amalthea unipalatalis* n. subsp., *A. arthuriana xenogena* n. subsp., *A. candida monachorum* n. subsp., *A. corrugata gemina* n. subsp., *A. eburnea sprattiana* n. subsp., *A. idaea letoana* n. subsp., *A. loosjesi sigridae* n. subsp., *A. maltzani ecristata* n. subsp., *A. tenuicostata theresia* n. subsp., *A. teres andreae* n. subsp., *A. troglodytes kitteli* n. subsp., and *A. xanthostoma diktynna* n. subsp.

*A. arthuriana xenogena* n. subsp. from Milatos Cave has originated by interspecies hybridization of *A. arthuriana* and *A. maltzani*. A further hybrid form of the species *A. tenuicostata* and *A. loosjesi* from Gramvousa Peninsula is described. The hybrid character of a form of the species *A. troglodytes* from Asfendou Gorge resembling *A. sublamellosa* is not yet clear. Both are not named.

**(2018a) The door snail form the banana tree in Laos (Gastropoda, Stylommatophora, Clausiliidae, Phaedusinae). — *Conchylia*, 48 (3/4): 47-50, 1 pl.**

In this paper a new species of a new genus of the family Clausiliidae, subfamily Phadusinae, from Laos is described: *Musaphaedusa* n. gen., type species *Musaphaedusa hisanoi* n. sp. Remarkably, it has been found on banana trees.

**(2018b) A new genus of Helicidae (Stylommatophora, Gastropoda) from Early Pleistocene of Lower Austria, with information on the microsculpture of some Plio- and Pleistocene Helicoidea from central Europe. — *Conchylia*, 48 (3/4): 51-58, 3 pls.**

In this paper a new genus of Pleistocene Helicidae, *Pseudoklikia* n. gen. (type species *Klikia altenburgensis* BINDER 1977, Deutsch-Altenburg 4B, Early Pleistocene), is described, mainly based on the microsculpture of the shell. It is compared with some helicoid species of similar size from Pliocene and Pleistocene of central Europe, the microsculpture of which is insufficiently known.

**(2019) New and Unknown Species Taxa of Western Palaearctic Clausiliidae (Gastropoda, Stylommatophora). — *Conchylia*, 50 (1-4): 91-115.**

In this paper the following species taxa of western Palaearctic Clausiliidae are described as new: *Albinaria eikenboomi* n. sp., *A. menelaus flammigera* n. subsp., *Alopia (A.) straminicollis gilma* n. subsp., *Barcania bengasiana brandti* n. subsp., *B. kaltenbachi basalifera* n. subsp., *B. sasaensis costellata* n. subsp., *Ruthenica filograna kimakowiczi* n. subsp., *R. f. streicola* n. subsp., *Strigillaria (S.) vetusta bielzi* n. subsp., *S. (Bulgarica) iniucunda erossi* n. subsp., and *S. (Denticularia) thessalonica martiniae* n. subsp. Some unknown infraspecific taxa of *Alopia (A.)* species are presented, but not named.

**(2020a) Late Eocene non-marine gastropods from Roc de Santa (Spanish Pyrenees). — *Archiv für Molluskenkunde*, 149 (1): XXX-XXX. [Harzhauser, M., Neubauer, T. A., Nordsieck, H., Marigo, J. & Minwer-Barakat, R.] (in press).**

The present contribution details a moderately diverse fauna of freshwater and terrestrial gastropods from Roc de Santa in the Spanish Pyrenees. The strata at this locality, famous for its mammal fauna, have been dated to the early Priabonian (European mammal stage MP17) based on mammals. The molluscan fauna consists of 5 aquatic species, belonging to the families Hydrobiidae, Lymnaeidae, and Planorbidae, and 15 terrestrial species, assigned to Craspedopomatidae, Cochlostomatidae, Strobilopsidae, Vertiginidae, Discidae, Filholiidae, Clausiliidae, Archaeozonitidae, Helicoidea indet., and familia incerta (Trissexodontidae?). *Eohispania* nov. gen., *Headonia* nov. gen., *Neniopsilla* nov. gen., *Pseudotectonica* nov. gen., *Laxecostula* nov. gen., *Eohispania dominicii* nov. sp., *Belgrandiella? nichteri* nov. sp., *Enneopupa priabonica* nov. sp., *Paracraticula? catalaunica* nov. sp., *Calogniodiscus pyrenaicus* nov. sp., *Triptychia catalanica* nov. sp., *Laminifera nannodes* nov. sp., *Neniopsilla amoena* nov. sp., and *Pseudotectonica pulchra* nov. sp. are introduced as new taxa. The paucity of comparable Eocene non-marine assemblages in western Europe renders this fauna an important addition to the Paleogene continental gastropod record. The assemblage points to the presence of a humid forest with small lakes or ponds.

**(2020b) Clausiliens aus Meeresgenisten von Montenegro, mit revisorischen Bemerkungen zu *Siciliaria stigmatica* (Gastropoda, Pulmonata, Clausiliidae). — *Mitteilungen der Deutschen Malakozoologischen Gesellschaft*, XXX: XXX-XXX (in press).**

At the beach of Ulcinj, Montenegro, hundreds of clausiliid shells were collected in 1973 from marine debris. The material, which consists nearly exclusively of shells of *Siciliaria stigmatica* (Rossmässler, 1836) (Clausiliidae, Alopiinae), is analyzed in this paper. As result revisory remarks on the taxonomy and nomenclature of this species are made.

