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Revised and Updated Systematic Inventory of Non-Marine Molluscs Occurring in the State of Santa Catarina/SC, Central Southern Brazil Region

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Abstract

Based on the last list of non-marine molluscs from Santa Catarina state, published in 2014, the current inventory of continental molluscs (terrestrial and freshwater) occurring in the State of Santa Catarina/SC is finally consolidated, with a verified/confirmed registry of 232 species and subspecies, sustained product of complete 22 years of systematic field researches, examination of specimens deposited in collections of museums and parallel reference studies, covering 198 gastropods (156 terrestrial, 2 amphibians, 40 freshwater) and 34 limnic bivalves, in addition to the addition of another new twelve (12) species (eighth land gastropods - *Leptinaria parana* (Pilsbry, 1906); *Bulimulus* cf. *stilbe* Pilsbry, 1901; *Orthalicus* aff. *prototypus* (Pilsbry, 1899); *Megalobulimus abbreviatus* Bequaert, 1848; *Megalobulimus januarunensis* Fontanelle, Cavallari & Simone, 2014; *Megalobulimus sanctipauli* (Ihering, 1900); *Happia* sp (in determination process); *Macrochlamys indica* Benson, 1832 - and four bivalves - *Corbicula fluminalis* (Müller, 1774); *Pisidium* aff. *dorbignyi* (Clessin, 1879); *Pisidium* aff. *vile* (Pilsbry, 1897); *Sphaerium cambaraense* (Mansur, Meier-Brook & Ituarte, 2008) -). Among the species previously related, 26 correspond to exotic and invasive forms (22 gastropods, four bivalves). Additional information regarding its known regional geographic distribution is incorporated/included and updated.

Keywords

Continental (land & limnic) molluscs, Santa Catarina state, Central southern brazil region, Species inventory

Abbreviations

FURB MO - Malacological collection of Fundação Universidade Regional de Blumenau

Continuing with the regional researches conducted since the year 1996 [1], the present contribution incorporates a further twelve (12) species of continental molluscs (terrestrial and freshwater) to the systematic inventory of the State of Santa Catarina/SC previously established [2], knowledge reached in the course of survey work based mainly on publishing reports [3-8], increasing to 232 its number of registered forms, including 99 genera (87 Gastropoda & 12 Bivalvia) and 41 families (36 Gastropoda & 5 Bivalvia) regionally known (Table 1), the final product of complete 22 years of sustained research.

The taxonomic arrangement presented, including categories of genus, species and subspecies, follows the classification of Agudo-Padrón [2,9] involving the general contributions of Bouchet & Rocroi [10], Simone [11], Thomé, et al. [12], Simone [13], Breure, et al. [14], Breure & Romero [15] and Birckolz, et al. [16]. Additionally, the valid status of each species was verified through the virtual program WoRMS (World Register of Marine Species), which also involves non-marine forms.

As in the previous opportunity, the territory of the State was divided into six (6) large malacological regions (Figure 1), for the purposes of the best knowledge concerning the biogeographic distribution of the species

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Table 1: Systematic Relationship of Non-marine Mollusc Species Occurring in the Santa Catarina's State Territory, Southern Brazil, and your Regional Known Spatial Distribution (Figure 1, for Numeric Relation).

GASTROPODA Cuvier, 1795

CAENOGASTROPODA Cox, 1960

Family AMPULLARIIDAE Gray, 1824
Asolene (Pomella) megastoma (Sowerby, 1825) - 3
Felipponea iheringi (Pilsbry, 1933) - 3
Pomacea bridgesii (Reeve, 1856) - 1, 2, 5, 6
Pomacea canaliculata (Lamarck, 1819) - 1, 5, 6
Pomacea lineata (Spix, 1827) - 4, 5, 6
Pomacea paludosa (Say, 1829) - 6
Pomacea sordida (Swainson, 1822) - 1, 2, 5, 6

Family HELICINIDAE Férussac, 1822
Helicina brasiliensis (Gray, 1824) - 1, 2, 5, 6
Helicina angulata (Sowerby, 1873) - 2, 6
Helicina angulifera (Wagner, 1910) - 1, 2, 6
Helicina laterculus (Baker, 1913) - 5, 6
Helicina scherer (Baker, 1913) - 6
Oxyrhombus densestriatus (Wagner, 1910) - 3
Alcadia iheringi (Wagner, 1910) - 3

Family DIPLOMMATINIDAE Pfeiffer, 1857
Adelopoma brasiliense (Morretes, 1953) - 6
Adelopoma paraguayana (Parodiz, 1944) - 3, 6

Family HYDROBIIDAE Stimpson, 1865
Littoridina australis (d'Orbigny, 1835) - 1
Littoridina piscium (d'Orbigny, 1835) - 1, 2, 5, 6
Littoridina charruana (d'Orbigny, 1840) - 1, 3, 4
Littoridina davisi (Silva & Thomé, 1985) - 5

Family TATEIDAE Thiele, 1925
Potamolithus catharinae (Pilsbry, 1911) - 2, 3, 4, 6
Potamolithus kusteri (Ihering, 1893) - 3, 4
Potamolithus lapidum (d'Orbigny, 1835) - 3
Potamolithus philippianus (Pilsbry, 1911) - 2, 3, 6

Family ASSIMINEIDAE H. Adams & A. Adams, 1856
Assiminea sp (in determination process) - 1, 2, 6

Family THIARIDAE Gill, 1871 (1823)
Aylacostoma sp (in determination process) - 6
Melanoides tuberculata (Müller, 1774) - 1, 2, 6

GYMNOPHILA Baker, 1955

Family VERONICELLIDAE Gray, 1840
Angustipes erinaceus (Colosi, 1921) - 1, 2, 6
Belocaulus angustipes (Heynemann, 1885) - 1, 3, 5, 6
Phyllocaulis boraceiensis (Thomé, 1976) - 1, 2, 6
Phyllocaulis soleiformis (d'Orbigny, 1835) - 1, 2, 3, 4, 5
Phyllocaulis tuberculosus (Martens, 1868) - 1, 2, 3, 4, 5
Phyllocaulis variegatus (Semper, 1885) - 1, 2, 3
Sarasinula dubia (Semper, 1885) - 2, 6
Sarasinula linguaeformis (Semper, 1885) - 1, 3, 5
Sarasinula plebeia (Fischer, 1868) - 1
Sarasinula sp (in determination process) - 1
Vaginulus taunayi (Férussac, 1821) - 2

PULMONATA Cuvier, 1817

Family SUCCINEIDAE Beck, 1837
Omalonyx convexus (Heynemann, 1868) - 1, 5, 6
Succinea meridionalis (d'Orbigny, 1846) - 1, 2, 4, 5, 6

Family ANCYLIDAE (Menke, 1830)
Burnupia ingae (Lanzer, 1991) - 5
Hebetancylus moricandi (d'Orbigny, 1837) - 1, 4, 5, 6
Ferrissia gentilis (Lanzer, 1991) - 5
Uncancylus concentricus (d'Orbigny, 1835) - 3

Family CHILINIDAE Dall, 1870
Chilina fluminea (Maton, 1809) - 3, 4
Chilina globosa (Frauenfeld, 1881) - 4, 6
Chilina parva (Martens, 1868) - 3, 5

Family PHYSIDAE Fitzinger, 1833
Physa acuta (Draparnaud, 1805) - 1, 5, 6
Aplexa marmorata (Guilding, 1828) - 1, 3, 5

Family LYMNAEIDAE Rafinesque, 1815
Lymnaea columella (Say, 1817) - 1, 2, 3, 4, 5, 6
Lymnaea rupestris (Paraense, 1982) - 3
Lymnaea viatrix (d'Orbigny, 1835) - 1, 6

Family PLANORBIDAE Rafinesque, 1815
Biomphalaria glabrata (Say, 1818) - 1, 5, 6
Biomphalaria occidentalis (Paraense, 1981) - 1, 2
Biomphalaria oligoza (Paraense, 1981) - 1
Biomphalaria peregrina (d'Orbigny, 1835) - 3, 6
Biomphalaria schrammi (Crosse, 1864) - ?
Biomphalaria straminea (Dunker, 1848) - 1, 3, 4
Biomphalaria tenagophila (d'Orbigny, 1835) - 1, 2, 3, 5, 6
Acrorbis petricola (Odhner, 1937) - 3
Drepanotrema cimex (Moricand, 1838) - 1, 5
Drepanotrema heloicum (d'Orbigny, 1835) - 6
Drepanotrema pfeifferi (Strobel, 1874) - 3, 6

Family SUBULINIDAE Thiele, 1931
Subulina octona (Bruguière, 1792) - 1, 3, 6
Lamellaxis clavulinus (Potiez & Michaud, 1838) - 6
Lamellaxis gracilis (Hutton, 1834) - 1, 2, 6
Lamellaxis goodalli (Miller, 1822) - 5
Lamellaxis (Leptopeas) mizius (Marcus & Marcus, 1968) - 5, 6
Allopeas micra (d'Orbigny, 1835) - 1, 5
Leptinaria anomala (Pfeffer, 1846) - 5
Leptinaria concentrica (Reeve, 1849) - 2, 6
Leptinaria monodon (C. B. Adams, 1849) - 3
Leptinaria parana (Pilsbry, 1906) (Figure 2) - 1
Leptinaria ritchiei (Pilsbry, 1906) - 2
Leptinaria unilamellata (d'Orbigny, 1835) - 1, 2
Obeliscus pattalus (Pilsbry 1960) - 5
Obeliscus sylvaticus (Wagner, 1827) - 5
Rumina decollata (Linnaeus, 1758) - 1

Family PHILOMYCIDAE Keferstein, 1866
Meghimatium pictum (Stoliczka, 1873) - 1, 2, 3, 4, 5, 6

Family LIMACIDAE Gray, 1824
Ambigolimax valentianus (Férussac, 1822) - 3
Limax flavus (Linnaeus, 1758) - 1, 3, 4, 6
Limax maximus (Linnaeus, 1758) - 1, 3, 4

Family AGRIOLIMACIDAE Wagner, 1935
Deroceras laeve (Müller, 1774) - 1, 2, 3, 4, 5, 6

Family ACHATINIDAE Swainson, 1840
Achatina (Lissachatina) fulica (Bowdich, 1822) - 1, 2, 5, 6

Family BULIMULIDAE Tryon, 1896
Bulimulus angustus (Weyrauch, 1966) - 1
Bulimulus sporadicus (d'Orbigny, 1835) - 1, 5
Bulimulus tenuissimus (d'Orbigny, 1935) - 1, 4, 5
Bulimulus turritellatus (Beck, 1837) - 6
Bulimulus cf. stilbe (Pilsbry, 1901) (Figure 3)* - 1

*Species previously reported for the State in Agudo-Padrón [24]
Drymaeus acervatus (Pilsbry, 1895) - 1, 6
Drymaeus acuminatus (Da Costa, 1906) - 1
Drymaeus henselii (Martens, 1868) - 3
Drymaeus magus (Wagner, 1827) - 1
Drymaeus muelleggeri (Jaeckel, 1927) - 1
Drymaeus papyraceus papyraceus (Mawe, 1823) - 1
Drymaeus papyrifactus (Pilsbry, 1898) - 1
Drymaeus poecilus (d'Orbigny, 1835) - 3
Mesembrinus interpunctus (Martens, 1887) - 1, 2, 3, 5
Naesiotus eudioptus (Ihering in Pilsbry, 1897) - 3
Pseudoxychona polytricha (Ihering, 1912) - 6
Protoglyptus dejectus (Fulton, 1907) - ?

Family ORTHALICIDAE Albers, 1860
Orthalicus aff. prototypus (Pilsbry, 1899)* - 3

*Species previously reported for the State in Agudo-Padrón [7]

Family MEGASPIRIDAE Pilsbry, 1904
Thaumastus hebes (Strebel, 1910) - ?
Thaumastus largillierti (Phillippi, 1845) - ?
Thaumastus sellovii (King, 1831) - ?
Thaumastus taunaisii (Férussac, 1821) - ?

Family AMPHIBULIMIDAE Fischer, 1873
Plekocheilus (Eurytus) aff. rhodocheilus (Reeve, 1848) (Figure 4)* - 2, 5, 6

*Species previously reported for the State in Agudo-Padrón [2], Agudo-Padrón, et al. [4] and Breure [25].

Family SIMPULOPSIDAE Schileyko, 1999
Leiostracus sp (in determination process) - 3
Rhinus cilliatus (Gould, 1846) - 1, 5
Rhinus obeliscus (Haas, 1936) - ?
Rhinus cf. longisetus (Moricand, 1846) - 6
Simpulopsis (Eudioptus) araujoi (Breure, 1975) - 3
Simpulopsis corrugata (Guppy, 1866) - 2, 5, 6
Simpulopsis gomesae (Silva & Thomé, 2006) - 2, 6
Simpulopsis ovata (Sowerby, 1822) - 6
Simpulopsis promatensis (Silva & Thomé, 2006) - 6
Simpulopsis (Simpulopsis) pseudosulculosa (Breure, 1975) - 3
Simpulopsis (Simpulopsis) sulculosa (Férussac, 1819) - 1, 5, 6
Simpulopsis (Simpulopsis) wiebesi (Breure, 1975) - 3
Simpulopsis decussata (Pfeiffer, 1856) - 1, 6
Eudioptus citrinovitreus (Moricand, 1836) - 6

Family STROPHOCHEILIDAE Thiele, 1926
Megalobulimus abbreviatus (Bequaert, 1848*) - 5

*Species previously confirmed for the State in Agudo-Padrón [5]
Megalobulimus grandis (von Martens, 1798) - 2
Megalobulimus granulosus (Rang, 1831) - 1, 2, 5
Megalobulimus gummatus (Hidalgo, 1870) - 3
Megalobulimus haemastomus (Scopoli, 1786) - 2, 3, 6
Megalobulimus jaguarunensis (Fontenelle, Cavallari & Simone, 2014*) - 5

*Species previously confirmed for the State in Agudo-Padrón [5]
Megalobulimus proclivis (Martens, 1888) - ?
Megalobulimus klappenbachi (Leme, 1964) - 2
Megalobulimus ovatus (Müller, 1774)* - 2
*See Birckolz, et al. [23]

Megalobulimus toriii (Morretes, 1937) - 2
Megalobulimus oblongus (Müller, 1775) - 1, 2, 3, 5, 6
Megalobulimus elongatus (Bequaert, 1948) - 1, 2, 5, 6
Megalobulimus musculus (Bequaert, 1948) - 1, 2, 3, 4, 6
Megalobulimus paranaguensis (Pilsbry & Ihering, 1900) - 2
Megalobulimus sanctipauli (Ihering, 1900)* - 3

*Species with "pre-anticipated report" available in Agudo-Padrón, et al. [4] and confirmed in Agudo-Padrón [5]
Megalobulimus terrestris (Spix, 1827) - ?
Strophocheilus pudicus (Müller, 1774) - 4, 6
Mirinaba erythrosoma (Pilsbry, 1895) - 2, 4, 5, 6
Mirinaba fusoides (Bequaert, 1948) - 2
Mirinaba planidens (Michelin, 1831) - 1, 2, 6
Mirinaba unidentata (Sowerby, 1825) - 1
Gonyostomus turnix (Guld, 1846) - 1

Family ODONTOSTOMIDAE Pilsbry & Vanatta, 1898
Bahiensis occultus (Reeve, 1849) - ?
Bahiensis punctatissimus (Lesson, 1830) - 1
Bahiensis reevei (Deshayes, 1851) - ?
Cyclodontina catharinae (Pfeiffer, 1856) - 1, 2
Cyclodontina fusiformis (Menke, 1828) - ?
Cyclodontina tudiculata (Martens, 1868) - 1, 2, 3
Macrodontes grayanus (Pfeiffer, 1845) - 1, 2
Macrodontes gargantua (Férussac, 1821) - 3
Macrodontes fasciatus (Pfeiffer, 1869) - 2, 3, 6
Macrodontes odontostomus (Sowerby, 1824) - 3
Macrodontes thielei (Pilsbry, 1930) - 3
Moricandia parallela (Pfeiffer, 1857) - ?

Family BRADYBAENIDAE Pilsbry, 1934
Bradybaena similaris (Rang, 1831) - 1, 2, 3, 4, 5, 6

Family STREPTAXIDAE Gray, 1806
Streptaxis contusus (Férussac, 1821) - ?
Streptaxis cypsele (Pfeiffer, 1849) - ?
Streptaxis iheringi (Thiele, 1927) - 1, 2
Streptaxis pfeifferi (Pilsbry, 1930) - 3
Rectartemon muelleri (Thiele, 1927) - 6
Rectartemon candidus (Wagner, 1827) - ?
Rectartemon depressus (Heynemann, 1868) - 2, 6

Family HELICIDAE Rafinesque, 1820
Helix (Cornu) aspersa (Müller, 1774) - 1, 2, 4, 6

Family SYSTROPIDAE (Thiele, 1926)
Entodina gionensis (Morretes, 1940) - 1, 2
Prohappia besckei (Dunker, 1847) - 2, 6
Happia iheringi (Clessin, 1888) - 1, 5
Happia insularis (Boettger, 1889) - 3, 6

Happia microdiscus (Thiele, 1927) - 3
Happia muelleri (Thiele, 1927) - 2, 6
Happia sp (in determination process) (Figure 5)* - 2, 6
*Species previously confirmed for the State in Agudo-Padrón & Funez [2]

Happia vitrina (Wagner, 1827) - 1, 2, 6
Happiella grata (Thiele, 1927) - 3, 5
Miradiscops brasiliensis (Thiele, 1927) - 3, 6
Scolodonta iheringi (Pilsbry, 1900) - 5
Tamayoa cf. banghaasi (Boettger in Thiele, 1927) - 2, 6

Family ARIOPHANTIDAE Godwin-Austen, 1888
Macrochlamys indica (Benson, 1832) (Figure 6) - 1, 2, 4, 6

Family CHAROPIDAE Hutton, 1884
Lilloiconcha superba (Thiele, 1927) - 5
Radioconus amoenus (Thiele, 1927) - 5
Radiodiscus bolachaensis (Fonseca & Thomé, 1994) - 3
Radiodiscus costellifer (Scott, 1957) - 3
Radiodiscus goeldii (Thiele, 1927) - 3
Radiodiscus vazi (Fonseca & Thomé, 1995) - 5
Zilchogyra clara (Thiele, 1927) - 3, 6
Zilchogyra cleliae (Weyrauch, 1965) - 1, 2, 6
Zilchogyra zulmae (Miguel, Ramiris & Thomé, 2004) - 5
Lilloiconcha gordurasensis (Thiele, 1927) - 1, 2, 3, 6
Rotadiscus amacaezensis (Hidalgo, 1869) - 5
Rotadiscus schuppi (Suter, 1900) - 3

Family EUCONULIDAE Baker, 1928
Habroconus martinezi (Hidalgo, 1869) - 1
Habroconus semenlini (Moricand, 1846) - 3, 6

Family ZONITIDAE Mörch, 1864
Oxychilus nitidus (Müller, 1774) - 3
Zonitoides arboreus (Say, 1816) - 3

Family VERTIGINIDAE Fitzinger, 1833
Gastrocopta oblonga (Pfeiffer, 1852) - 6
Gastrocopta solitaria (Smith, 1890) - 1, 2
Pupisoma discoricola (Adams, 1845) - 1
Vertigo ovata (Say, 1822) - 3

Family HELMINTHOGLYPTIDAE Pilsbry, 1939
Epiphragmophora semiclausa (Martens, 1868) - 3

BIVALVIA Linnaeus, 1758

UNIONOIDA Stoliczka, 1871

Family MYCETOPODIDAE Gray, 1840
Mycetopoda legumen (Martens, 1888) - 3, 5
Mycetopoda siliquosa (Spix, 1827) - ?
Anodontites elongatus (Swainson, 1823) - 3, 6
Anodontites tenebricosus (Lea, 1834) - 1, 3, 5
Anodontites ferrarisii (d'Orbigny, 1835) - 3
Anodontites moricandi (Lea, 1860) - 3
Anodontites patagonicus (Lamarck, 1819) - 3, 6
Anodontites obtusus (Spix, 1927) - 3
Anodontites trapesialis (Lamarck, 1819) - 2, 3, 5, 6
Leila blainvilleana (Lea, 1834) - 1
Monocondylaea minuana (d'Orbigny, 1835) - 3

Family HYRIIDAE Swainson, 1840
Diplodon aethiops (d'Orbigny, 1835) - 1, 3, 4, 5, 6
Diplodon ellipticus (Wagner in Spix, 1827) - 2, 3, 4, 5
Diplodon expansus (Küster, 1856) - 1, 2, 3, 4, 5, 6
Diplodon (Rhipidodonta) koseritzi (Clessin, 1888) - 3
Diplodon multistriatus (Lea, 1834) - 3
Diplodon delodontus (Lamarck, 1819) - 3, 6
Diplodon parallelipipedon (Lea, 1834) - 4
Diplodon rhuacoicus (d'Orbigny, 1835) - 3, 4, 5
Rhipidodonta rhombea (Wagner, 1827) - 3

VENEROIDA Gray, 1854

Family CYRENIDAE Gray, 1847
Corbicula fluminalis (Müller, 1774)* - 3

*Species previously reported for the State in Agudo-Padrón [8,24]
Corbicula fluminea (Müller, 1774) - 2, 3, 5, 6
Corbicula largillierti (Philippi, 1844) - 1, 2, 3, 5, 6
Cyanocyclas limosa (Maton, 1809) - 3

Family SPHAERIIDAE Deshayes, 1855
Eupera klappenbachi (Mansur & Veitenheimer-Mendes,1975) - 1
Eupera platensis (Doello-Jurado, 1921) - 3
Pisidium aff. dorbignyi (Clessin, 1879)* - 3

*Species previously reported for the State in Agudo-Padrón [19]
Pisidium globulus (Clessin, 1888) - 1, 3
Pisidium observationis (Pilsbry, 1911) - 3, 4
Pisidium pipoense (Ituarte, 2000) - 3
Pisidium taraguyense (Ituarte, 2000) - 3
Pisidium aff. vile (Pilsbry, 1897)* - 3

*Species previously reported for the State in Agudo-Padrón [19]
Sphaerium cambaraense (Mansur, Meier-Brook & Ituarte, 2008)* - 3
*Species previously reported for the State in Agudo-Padrón [19]

Family MYTILIDAE Rafinesque, 1815
Limnoperna fortunei (Dunker, 1857) - 2, 3

thus enumerated [2]. For each related taxa/species a certain quantity of numbers are included, indicating their known spatial occurrence in the corresponding geographical regions.

Results

Species Inventory (Table 1).

Final Considerations

Traditionally, research on molluscs in the Santa Catarina State/SC territory has focused almost entirely on development of commercial cultivation of marine species, non-natives and natives [17,18] and, very occasionally, some freshwater forms [19]. Other general aspects of their bio-ecology, distribution and conservation situation are practically ignored and/or relegated to the background [8,20-22]. However, there are researchers who act outside the State expressing an occasional interest in developing

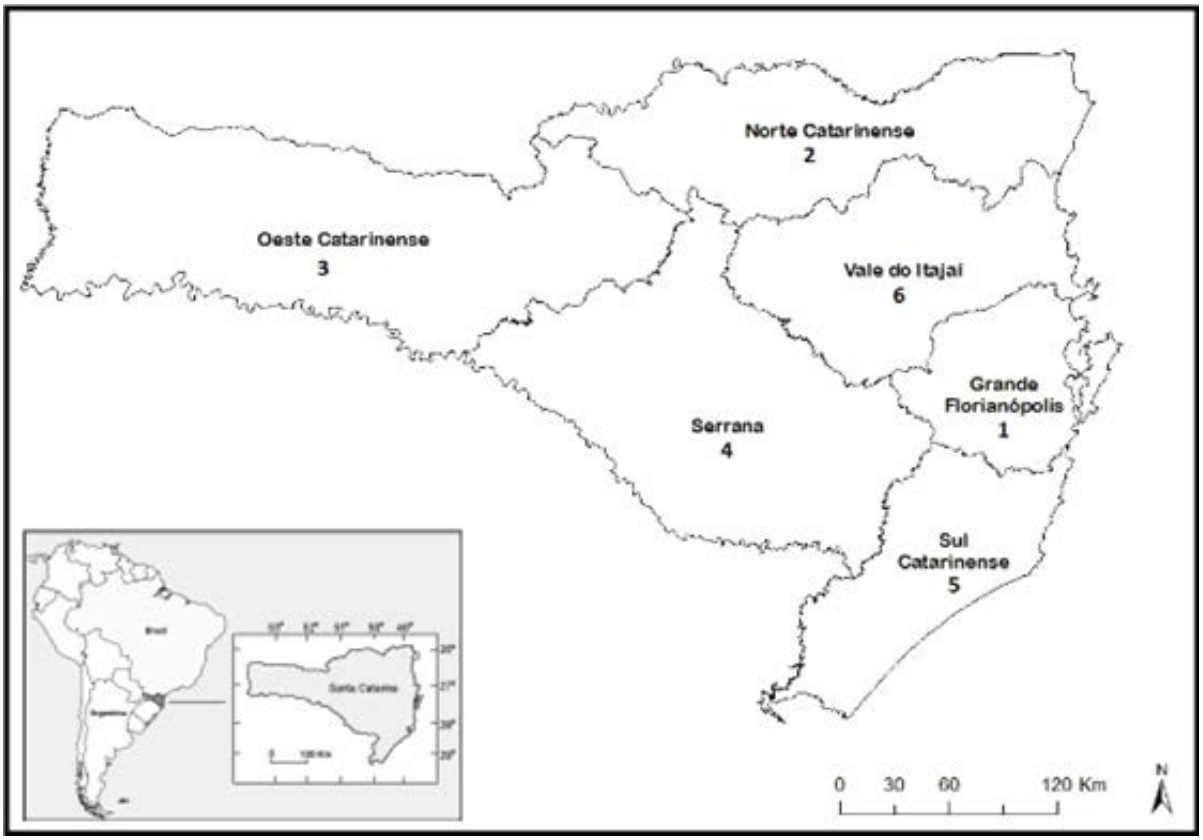

Figure 1: Malacological division of the Santa Catarina State/SC geographic territory: (1) Greater Florianópolis, coastal and mountain Region; (2) Northern Region; (3) Western Region; (4) Highlands Region; (5) Southern Region; (6) Itajaí River Valley region. Credit Map: Original by A. Ignacio Agudo-Padrón, Project AM.

Figure 2: Native snail SUBULINIDAE *Leptinaria parana* (Pilsbry, 1906), found in "Estreito Continental Neighborhood", Florianópolis Municipal District, Great Florianópolis region, Santa Catarina State/SC. Credit photo: Jefferson Souza da Luz, Project AM. Specimen with aprox. 4 mm.

Figure 3: Sandbanks native snail BULIMULIDAE Bulimulus cf. stilbe (Pilsbry, 1901), found in "Ponta do Papagaio" Seaside Resort, Palhoça Municipal District, Great Florianópolis region, Santa Catarina State/ SC. Credit photo: Archives Project AM, January 2009. Specimen with aprox. 21 mm.

some more specific and focused studies of the local malacofauna [23], particularly in the specific geographic and ecological region of the Itajaí Valley, the largest river basin of the Atlantic slope in Santa Catarina [18].

In this opportunity, additional twelve (12) new species (eight land gastropods - *Leptinaria parana* (Pilsbry, 1906) (Figure 2); *Bulimulus* cf. *stilbe* (Pilsbry, 1901) (Figure 3); *Orthalicus* aff. *prototypus* (Pilsbry, 1899); *Megalobulimus abbreviatus* (Bequaert, 1848); *Megalobulimus januarunensis* Fontanelle, (Cavallari & Simone, 2014); *Megalobulimus sanctipauli* (Ihering, 1900); *Happia* sp (in determination process) (Figure 4); *Macrochlamys indica* (Benson, 1832) (Figure 5) - and four bivalves - *Corbicula fluminalis* (Müller, 1774); *Pisidium* aff. *dorbignyi* (Clessin, 1879); *Pisidium* aff. *vile* (Pilsbry, 1897); *Sphaerium*

Figure 4: Native forest snail SYSTROPIIDAE *Happia* sp, species "in determination process" (FURB MO ?) previously cited for the neighbor State of Rio Grande do Sul/RS in Thomé, et al. [12]. Credit photo: Luís Adriano Funez, FURB. Specimen com 19 mm. Agudo-Padrón & Funez [3].

Figure 5: Exotic invasive indo-asiatic snail ARIOPHANTIDAE *Macrochlamys indica* (Benson, 1832), Ribeirão Café (General Road), Rio do Oeste Municipal District (distant 250 Km from the capital, Florianópolis, in the Upper Itajaí River Basin Valley region); Joinville (city and Municipal District); Palhoça, São José (cities and Municipal Districts) & Estreito Neighborhood (Continental Florianópolis), Santa Catarina State/SC, Central Southern Brazil. Credit photo: Jefferson Souza da Luz, Project AM. Specimen with 21 mm.

Figure 6: Native forest snail AMPHIBULIMIDAE P. Fischer, 1873 *Plekocheilus* (*Eurytus*) aff. *rhodocheilus* (Reeve, 1848), Timbé do Sul Municipal District (28°45'53.46"S ; 49°48'03.52"W - 494 meters above sea level), Santa Catarina State/SC, Southern Brazil region border with the neighboring State of Rio Grande do Sul/RS. Credit photos: Jefferson Souza da Luz, Project AM. Two specimens, with 28 and 31 mm.

cambaraense (Mansur, Meier-Brook & Ituarte, 2008) were confirmed and added to the inventory.

From the knowledge available in the last systematic listing generated [2], suppressed synonyms and some other inconsistencies detected that initially went unnoticed, still embedded in recently presented technical data [24], the current inventory of continental freshwater/limnic and land/terrestrial molluscs in the State of Santa Catarina/SC is finally consolidated, with a verified/confirmed record of 232 species and subspecies, including 99 genera (87 Gastropoda & 12 Bivalvia) and 41 families (36 Gastropoda & 5 Bivalvia) regionally known, the most recent being incorporated the natives SUBULINIDAE *Leptinaria parana* (Pilsbry, 1906) (Figure 2), BULIMULIDAE *Bulimulus* cf. *stilbe* (Pilsbry, 1901) (Figure 3), and the exotic invasive indo-asiatic ARIOPHANTIDAE *Macrochlamys indica* (Benson, 1832) (Figure 5).

Among the species previously listed in the list, 26 correspond to exotic and invasive forms (22 gastropods, four bivalves). On the other hand, the situation of one of the five (5) native Gastropoda species previously mentioned in the literature and awaiting taxonomic determination [2,4] the AMPHIBULIMIDAE *Plekocheilus (Eurytus)* aff. *rhodocheilus* (Reeve, 1848) (Figure 6), was "partially" resolved [25], but another one later incorporated, the SYSTROPHIIDAE *Happia* sp [3] (Figure 5) is still pending.

For all taxa involved in general (Table 1) new information concerning their known regional geographic distribution (Figure 1) have been incorporated/included and updated. This positive result (increase of reported species

and additions to the knowledge regarding the geographical coverage of this biodiversity in the state) clearly reflects the product of the systematic research and concentrated efforts developed on the field in recent last years.

Finally, only one (1) native form in particular, the bivalve HYRIIDAE *Diplodon expansus* (Küster, 1856) (Table 1), syn. *Rhipidodonta charruana* (d'Orbigny, 1835), occurs simultaneously in each and every one of the six (6) malacological regions estableced for the State (Figure 1), as well as the following four (4) invasive exotic gastropods: *Lymnaea columella* (Say, 1817), *Meghimatium pictum* (Stoliczka, 1873), *Deroceras laeve* (Müller, 1774) and *Bradybaena similaris* (Rang, 1831).

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