Penile rami basally fused, distally with 2 slender elongate rami. Pleopod 1 in male, basis broad, with 2 retinacula; endopod basally broad, distally tapering, longer than ovate and narrower exopod. Pleopod 2 in male, both rami ovate; copulatory stylet attached basally to endopod, basally broad, tapering distally, extending well beyond rami. Pleopod 3, basis produced mesially into lobe bearing 2 retinacula; endopod elongate-ovate, half length and width of exopod. Pleopod 4, both rami well developed, pleated. Pleopod 5, exopod ⅔ length of, and narrower than, exopod. Uropodal basis and endopod fused, almost reaching pleotelsonic apex, distally rounded; exopod short, ovate.

Remarks.—Menzies & Frankenberg (1966) regarded *Dies* and *Cassidinidea* as synonymous, but noted the single penis of the former and the double structure of the latter. Carvacho (1977) disagreed with Menzies & Frankenberg, maintaining that the genital structure required separation of the two genera. He further characterized *Dies* as being estuarine, *Cassidinidea* as truly marine. Heard (1982), however, recorded *C. ovalis* from the northeastern Gulf of Mexico, from salinities of <1‰-20‰, i.e., truly estuarine. Loyola e Silva (1960) also characterized *Dies* as having a single penis.

Cassidinidea mosaica differs from *C. ovalis* (Say, 1818) (=*C. lunifrons* (Richardson, 1905), see Schultz 1978, Heard 1982) known from New Jersey to Florida, in having a rounded posterior pleotelsonic margin, in being a smaller species (ovig. ♀ 1.5–1.6 mm), and in having a finely tuberculate dorsal integument.

Cassidinidea tuberculata Richardson, 1912, from Mexico, Brazil, Argentina (see Pires 1982), has a relatively larger uropodal exopod, a less ovate body outline, and a larger body-size (♀ tl 5.1 mm).

Etymology.—The specific name refers to the dorsal integument especially of the pleotelson, which resembles the closely-set tesserae of a mosaic (see Fig. 17).

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Literature Cited

Becker, G., and W.-D. Kampf. 1959. The wood-destroying isopod genus Limnoria at the continental coast of India and description of Limnoria indica sp. n.—Journal of the Timber Dryers' and Preservers' Association of India 5(1): 12–17.

Bruce, N. L. 1981. Cirolanidae (Crustacea: Isopoda) of Australia: Diagnoses of *Cirolana* Leach, *Metacirolana* Nierstrasz, *Neocirolana* Hale, *Anopsilana* Paulian & Debouteville, and three new genera—*Natatolana, Politolana* and *Carteto-lana.*—Australian Journal of Marine and Freshwater Research 32:945–966.

Brusca, R. C., and E. W. Iverson. 1985. A guide to the marine isopod Crustacea of Pacific Costa Rica.—Revista de Biologia Tropical, Universidad de Costa Rica 33 (supplement 1):i–iv, 1–77.

Carvacho, A. 1977. Isopodes de la mangrove de la Guadeloupe, Antilles Française.—Studies on the Fauna of Curaçao and other Caribbean Islands 54(174):1–24.

Glynn, P. W., and C. S. Glynn. 1974. On the systematics of *Ancinus* (Isopoda, Sphaeromatidae) with the description of a new species from the tropical Eastern Pacific.—Pacific Science 28(4):401–422.

Hansen, H. J. 1890. Cirolanidae et familiae nonnullae propinquae Musei Hauniensis.—K. Danske Videnskabernes Selskab Skrifter, Copenhagen, 6 Raekke, Naturvidenskabelig og Mathematisk Afdeling 3:239–426.

Heard, R. W. 1982. Guide to common tidal marsh invertebrates of the northeastern Gulf of Mexico. Mississippi-Alabama Sea Grant Consortium, Mobile, Alabama and Ocean Springs, Mississippi, 82 pp.

Kensley, B. 1982. Anthuridea (Crustacea: Isopoda) of Carrie Bow Cay, Belize. *In* K. Rützler and I. Macintyre, eds. The Atlantic Barrier Reef Ecosystem at Carrie Bow Cay, Belize, I: Structure and Communities.—Smithsonian Contributions to Marine Sciences 12:321–353.

———. 1984. The Atlantic barrier reef ecosystem at Carrie Bow Cay, Belize, III: New marine Isopoda.—Smithsonian Contributions to Marine Sciences 24:1–81.

Kühne, H. von. 1975. Zur geographischen Verbreitung holzzerstörender Crustaceen und Systematik der Untergattung *Limnoria* s. str. Menzies.—Material und Organismen Beiheft 3:543–553.

Kussakin, O. G. 1979. Marine and brackish water isopod crustaceans (Isopoda) of cold and temperate waters in the Northern Hemisphere. Suborder Flabellifera.—Opredeliteli Fauna SSSR 122:1–470. [In Russian]

Loyola e Silva, J. de 1960. Sphaeromatidae do litoral Brasileiro (Isopoda—Crustacea).—Boletim da Universidade do Paraná, Zoologia 4:1–182.

Menzies, R. J. 1951. A new species of *Limnoria* (Crustacea: Isopoda) from Southern California.—Bulletin of the Southern California Academy of Sciences 50(2):86–88.

———. 1957. The marine borer family Limnoriidae (Crustacea, Isopoda).—Bulletin of Marine Science of the Gulf and Caribbean 7(2):101–200.

———, and Frankenberg, D. 1966. Handbook on the common marine isopod Crustacea of Georgia. University of Georgia Press, Athens, Georgia, viii + 93 pp.

———, and P. W. Glynn. 1968. The common marine isopod Crustacea of Puerto Rico. A Handbook for Marine Biologists.—Studies on the Fauna of Curaçao and other Caribbean Islands 27 (104: 1–133.

———, and W. L. Kruczynski. 1983. Isopod Crustacea (exclusive of Epicaridea).—Memoirs of the Hourglass Cruises 6(1):1–126.

Mohr, J. L., and J. A. LeVeque. 1948. Folliculinids associated with *Limnoria* in California and Washington.—Journal of Parasitology 34(section 2):26. [Abstract]

Nordenstam, A. 1946. Marine Isopoda from Professor Dr. Sixten Bock's Pacific Expedition 1917–1918.—Arkiv for Zoologi 37A(7):1–31.

Ortiz, M. 1983. Guia para la identificacioin de los isopodos y tanaidaceos (Crustacea: Peracarida), asociadoss a los pilotes de las aguas Cubanas.—Revista de Investigaciones Marinas, Universidad de la Habana 4(3):3–20.

Pires, A. M. S. 1982. Sphaeromatidae (Isopoda: Flabellifera) da zona entre-mares e fundos rasos dos estados de Sao Paulo e Rio de Janeiro.—Boletim do Instituto Oceanográfico da Universidade de São Paulo 31(2):43–55.

Richardson, H. 1901. Key to the isopods of the Atlantic coast of North America with descriptions of new and little known species.—Proceedings of the United States National Museum 23:493–579.

———. 1905. A monograph on the isopods of North America.—Bulletin of the United States National Museum 54:i–liii, 1–727.

Schultz, G. A. 1969. How to know the marine isopod crustaceans. Wm. C. Brown Co., Dubuque, Iowa. i–vii + 359 pp.

———. 1978. Four marine isopod crustaceans from St. Catherines Island with a list of other species from Georgia.—Georgia Journal of Science 36: 1–12.

Stebbing, T. R. R. 1900. On Crustacea brought by Dr. Willey from the South Seas.—Willey's Zoological Results 5:605–690.

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