

**BIOMPHALARIA AMAZONICA PARAENSE, 1966 IN THE STATE OF  
MATO GROSSO DO SUL, BRAZIL (MOLLUSCA, PULMONATA,  
PLANORBIDAE)**

MARIA ELIZABETH CAVALHEIROS DORVAL & RUTH PINHEIRO DA SILVA

Departamento de Patologia, CCBS/UFMS, Caixa Postal 649, 79069 Campo Grande, MS, Brasil

Although a few cases of schistosomiasis *mansoni* have been recorded in the Brazilian state of Mato Grosso do Sul, their autochthony is highly doubtful. Six species of *Biomphalaria* (the genus of planorbid snails that includes the vectors of *Schistosoma mansoni*) were recognized in the state (W. L. Paraense, 1983, *Mem. Inst. Oswaldo Cruz*, 78: 343-361; and 1985, *Ibid.*, 80: 247-250). The only natural vector among them, *B. straminea*, was found in two localities, Ponta Porã and Três Lagoas, where schistosomiasis was never stated to occur.

So far only 14 of the 55 counties (*municípios*) of the state have been examined for planorbid snails. Since Mato Grosso do Sul is constantly receiving immigrants from endemic regions, a better knowledge of the distribution of planorbid snails throughout the state is essential to locate potential areas of introduction of schistosomiasis.

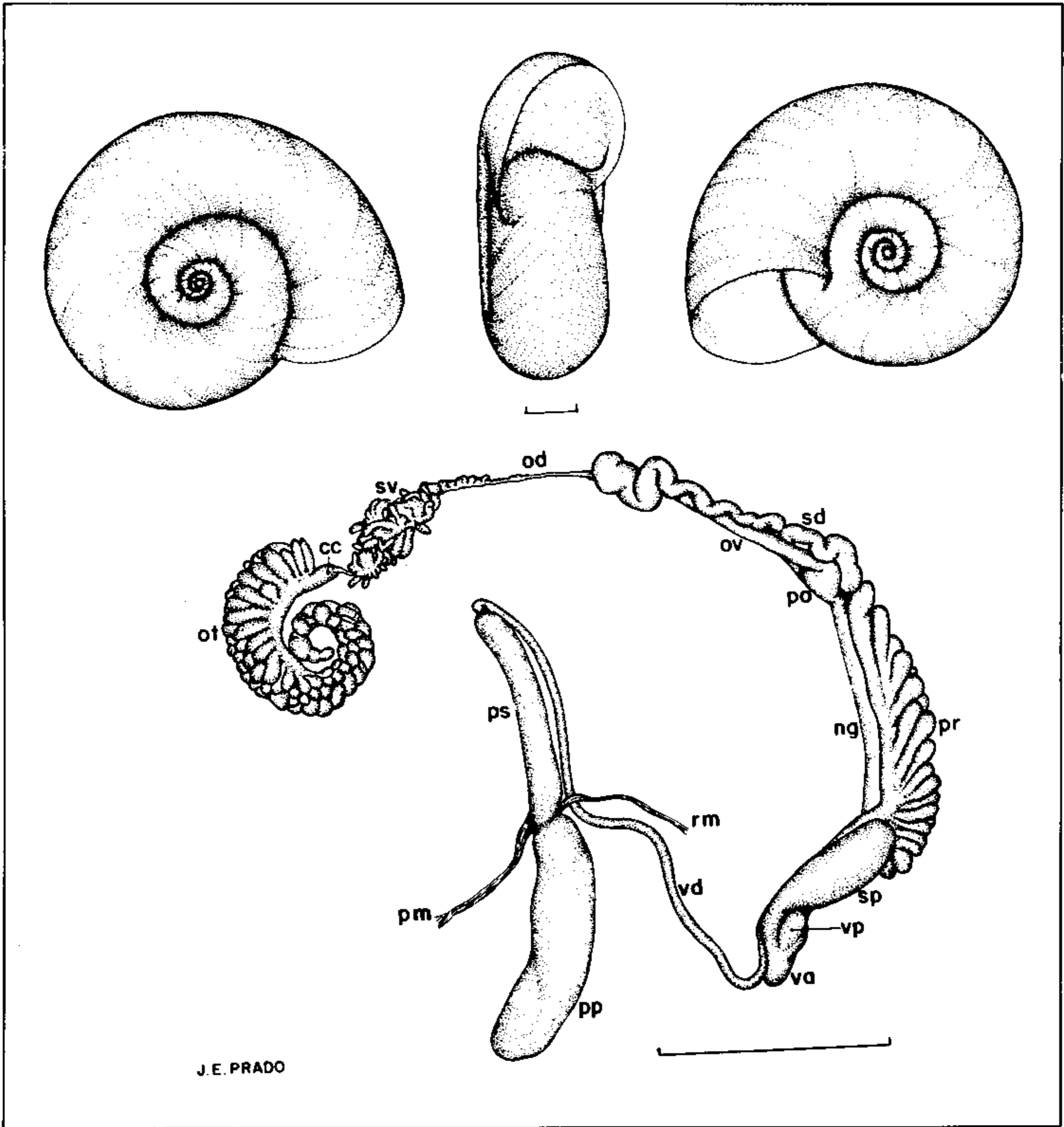
In October 1987, during a survey which is being carried out with that purpose, we found *Biomphalaria amazonica* Paraense, 1966 (*Rev. Brasil. Biol.*, 26: 115-126) in a pond at Fazenda

Marimbondo (about 19°34'S, 56°14'W), a cattle ranch in Aquidauana county (Fig. 1).

*Biomphalaria amazonica* has been found in the states of Amazonas, Acre, Rondônia and Mato Grosso (W. L. Paraense, 1983, quoted above), this being the first record of its occurrence in Mato Grosso do Sul, in the southernmost locality of its range.

Notwithstanding having not yet been found naturally infected with *S. mansoni*, *B. amazonica* has proved susceptible in laboratory experiments (L. R. Corrêa & W. L. Paraense, 1971, *Rev. Inst. Med. Trop. S. Paulo*, 13: 387-390; W. L. Paraense & L. R. Corrêa, 1985, *Mem. Inst. Oswaldo Cruz*, 80: 259-262). The presence of a potential vector of schistosomiasis in this state must be taken into consideration by the public health authorities.

*Acknowledgements:* to Dr W. L. Paraense for confirmation of our identification of the specimens, Mr J. Eduardo Prado for the drawings, and SUCAM for collaboration in field work.



*Biomphalaria amazonica* from Aquidauana county, MS – Shell (top) and reproductive system (bottom) – cc = collecting canal of ovotestis, ng = nidamental gland, od = distal segment of ovispermiduct, ot = ovotestis, ov = oviduct, pm = protractor muscle of penial complex, po = pouch of oviduct, pp = prepuce, pr = prostate, ps = penial sheath, rm = retractor muscle of penial complex, sd = spermiduct, sp = spermatheca, sv = seminal vesicle, va = vagina, vd = vas deferens, vp = vaginal pouch. – Bar = 1 mm.