

A New Species of *Westella* (Trematoda: Opisthogoniminae) from a Mexican Snake*

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ABSTRACT

Westella tabascensis sp. n. (Trematoda: Opisthogoniminae) from the mouth of a snake (*Coniophanes quinquevittatus*) from Tabasco, Mexico, is described.

In July 1958, seven specimens of an apparently undescribed species of *Westella* were recovered from the oral cavity of a snake (*Coniophanes quinquevittatus*) in the Mexican state of Tabasco. Six were prepared as whole mounts, and the seventh was serially sectioned. The measurements in the diagnosis are of the holotype followed by the size ranges in parentheses. All measurements are in millimeters.

Westella tabascensis sp. n.

Figure 1

Host: *Coniophanes quinquevittatus* (Duméril, Bibron, and Duméril).¹

Location: Oral cavity.

Locality: 15 miles south of Villahermosa, Tabasco, Mexico.

Holotype: USNM Helm. Coll.

Paratypes: Helm. Coll. Instituto de Biología, Mexico, D. F.; Dept. of Zoology, Louisiana State University; author's collection.

Diagnosis: Body broadly rounded anteriorly, tapering sharply posteriorly; 2.2 (1.8 to 2.34) long, 1.1 (0.85 to 1.1) in maximum width at level of pharynx.

Oral sucker subterminal, 0.456 (0.32 to 0.48) long, 0.47 (0.35 to 0.47) wide. Prepharynx moderately long. Length of pharynx 0.152 (0.15 to 0.165) width 0.216 (0.15 to 0.22) at anterior margin, tapering posteriorly. Esophagus very short. Intestinal caeca extend to near posterior end of body. Acetabulum 0.27 (0.248 to 0.27) long by 0.318 (0.234 to 0.318) wide. Acetabulo-oral sucker ratio, 1:1.5.

Testes spherical, diagonal, in posterior portion or middle third of body. Anterior testis 0.242

(0.23 to 0.30) long, 0.292 (0.25 to 0.292) wide. Posterior testis 0.254 (0.23 to 0.30) by 0.33 (0.25 to 0.33). Cirrus sac anterosinistral to acetabulum, long, slender, 0.445 (0.42 to 0.55) in length by 0.051 (0.05 to 0.068) in maximum diameter, with angular bend anteriorly; contains small seminal vesicle and prostatic cells. Genital aperture immediately posterior to acetabulum, somewhat to left of midline.

Ovary 0.292 (0.26 to 0.292) long, 0.254 (0.234 to 0.26) wide; in acetabular region or slightly preacetabular. Small seminal receptacle and ootype posterior to ovary. Vitelline follicles about 0.064 (0.027 to 0.095) in diameter, dorsally located in cecal and intercecal zones, from level of pharynx to posterior margin of testes. Uterus fills intercecal space posterior to acetabulum. Eggs numerous, 0.012 to 0.016 × 0.024 to 0.026.

DISCUSSION

Other species of *Westella* and the related genus *Opisthogonimus* Luehe, 1900, are known only from South America, principally Brazil. Artigas, Ruiz, and Leão (1942) erected the genus *Westella* and later (1943) gave it subgeneric status. In a revision of the Opisthogoniminae, Freitas (1956) reestablished *Westella* as a genus of the family Opisthogonimidae, an arrangement that has been followed by Skriabin (1960). *Westella* is characterized, in part, by the position of the genital pore be-

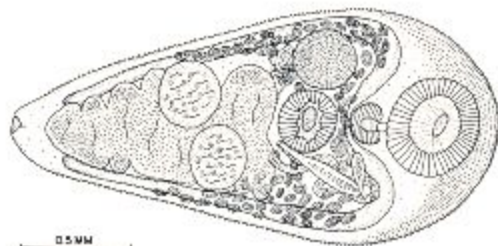


FIGURE 1. *Westella tabascensis*, camera lucida drawing of ventral aspect.

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¹ The host determination was made by Dr. Edward Taylor of the University of Kansas.

TABLE I. *Dimensional comparisons of Westella tabascensis and Westella serpentis.*

| | <i>W. tabascensis</i> | <i>W. serpentis</i> |
|-------------------|---------------------------------|------------------------------|
| Body: | | |
| length | 2.2 | 4.6-6.7 |
| width | 1.1 | 0.93-1.20 |
| Oral sucker: | | |
| diameter | 0.456-0.47 | 0.494-0.636 |
| Acetabulum: | | |
| diameter | 0.27-0.318 | 0.395-0.452 |
| Pharynx: | | |
| length | 0.152 | 0.130 |
| width | 0.216 | 0.225 |
| Anterior testis: | | |
| length | 0.242 | 0.339-0.494 |
| width | 0.292 | 0.296-0.297 |
| Posterior testis: | | |
| length | 0.254 | 0.367-0.537 |
| width | 0.33 | 0.353-0.438 |
| Ovary: | | |
| diameter | 0.254-0.292 | 0.212-0.395 |
| Eggs: | 0.0121-0.0156 × 0.0243-0.026 | 0.014-0.016 × 0.025-0.030 |

tween the acetabulum and the anterior testis whereas it is more posterior, usually between the testes, in *Opisthogonimus*.

Westella tabascensis bears some resemblance to *Opisthogonimus (Westella) serpentis* Artigas, Ruiz, and Leão, 1943, but differs from it in

several respects (Table I). The vitellaria of the present species extend anterior to the acetabular level while they reach only to the posterior margin of that sucker in *W. serpentis*. *W. tabascensis* is smaller, less attenuated, and has relatively larger suckers, a larger pharynx, and smaller eggs than does the Brazilian species.

LITERATURE CITED

- ARTIGAS, P. DE T., J. M. RUIZ, AND A. T. LEÃO. 1942. Trematoides de ofídios, *Liophistrema pulmonalis* n. g. n. sp. Liophistremiinae n. subfam. *Westella sulina* n. g. n. sp. (Plagiorchiidae). Mem. Inst. Butantan. **16**: 157-169.
- , ———, AND ———. 1943. Algumas notas sobre o genero *Opisthogonimus* Luche, 1900. Descriçao do *O. serpentis* sp. n. trematoide de ofideo. Mem. Inst. Butantan. **17**: 47-59.
- FREITAS, J. F. T. 1956. Breve nota sobre "Opisthogoniminae" Travassos, 1928 e grupos afins (Trematoda, Plagiorchoidea). Rev. Brasil. Biol. **16**: 141-144.
- SKRIBANIN, K. I. (ed.). 1960. *Trematodi zhivotnikh i Cheloveka*. Izdatelstvo Akad. Nauk. SSSR Moscow, Vol. 18, 746 pp.