

Nematology Laboratory of the Research Institute for Vegetable Crops  
96-100 Skierniewice, Poland

*LAMBERTIA ULIGINOSA* G. N., SP. N.  
(NEMATODA, NOTHOTYLENCHIDAE)

by

M. W. BRZESKI

*Lambertia* g. n.

Large and thin nematodes with thick and annulated cuticle. Amphids in form of longitudinal slits on lateral sides of lip region. Deirids at the same level as excretory pore. Phasmids invisible. Stylet large. Oesophagus with median bulb devoid of valvae, and with three oesophageal glands enclosed in terminal bulb. Oesophago-intestinal valvae small. Anterior part of excretory canal wide and strongly cuticularized. Female gonad prodelphic and monodelphic, spermatheca offset. Bursa adanal, spicules tylenchoid.

Type species: *L. uliginosa* sp. n.

The genus *Lambertia* g. n. is related to *Sakia* Khan, but differs in body size, thick cuticle, and unusually large stylet. No information is available on structure of amphids and gonads of *Sakia*. *Lambertia* differs from other genera of Nothotylenchinae sensu Jairajpuri and Siddiqi (1969), by elongated tail and adanal bursa.

The generic name *Lambertia* is given in honour of Prof. Dr. Franco Lamberti, in recognition of his contributions to the development of nematology in Italy.

*Lambertia uliginosa* sp. n.

For measurements see table.

Body straight when killed by heat. Cuticular annules rather flat. Lateral field with four incisures, begins at the level of median

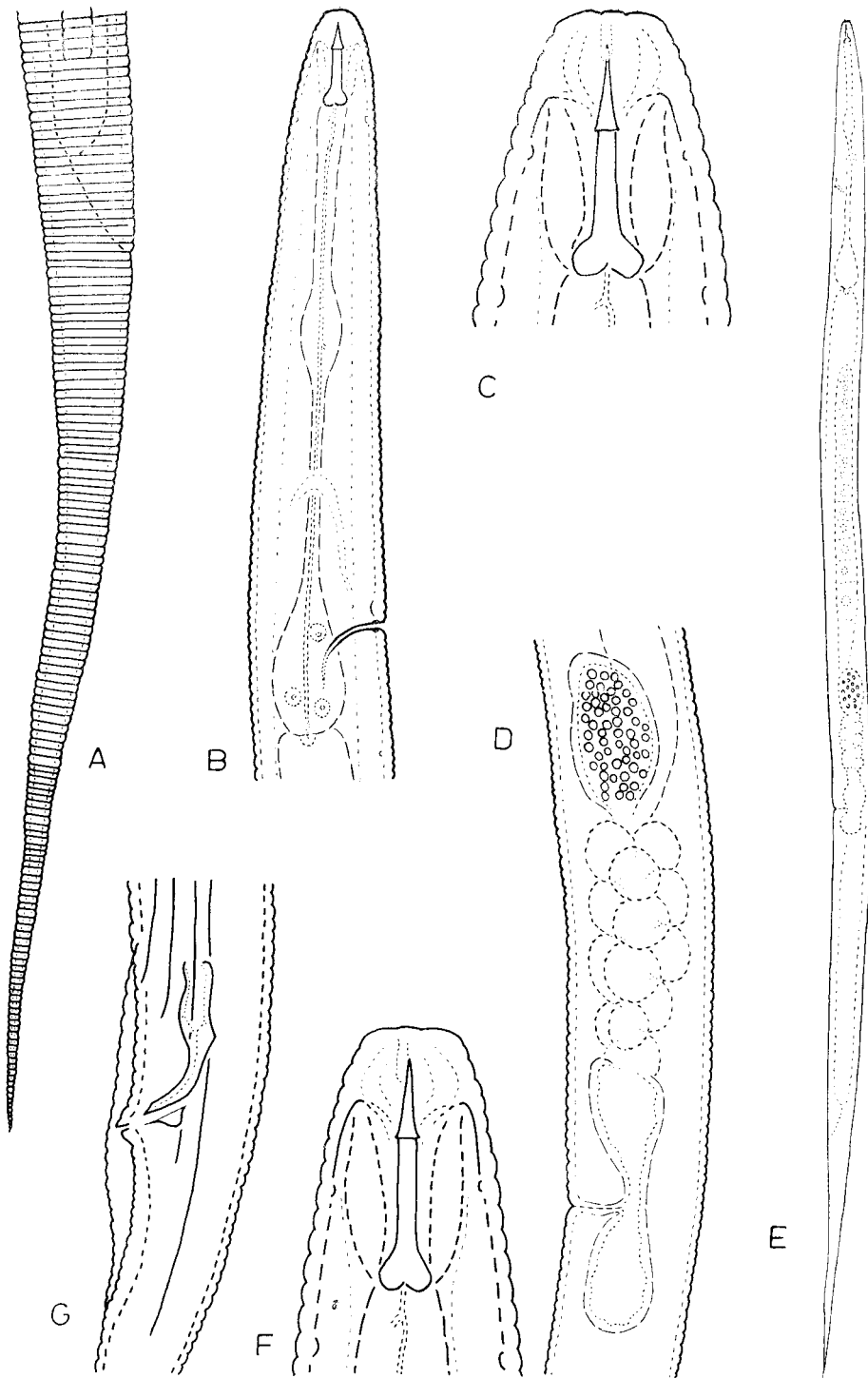


Fig. 1 - *Lambertia uliginosa* g. n., sp. n. A - female tail, B - oesophageal region, C - female head, D - part of female gonad, E - female, F - male head, G - cloacal region.

bulb, ends about two body widths anterior to anus being completely areolated in the posterior part. Lip region with 4 or 5 annules, rounded in outline with flattened anterior end. Both pairs of cephalids, hemizonid, hemizonion and deirids in usual position.

Stylet thick, with large knobs. Stylet knobs are larger in female than in male. Dorsal oesophageal gland orifice about 1 - 2  $\mu\text{m}$  posterior to stylet base. Stylet muscles attached to the internal parts of cephalic skeleton. Median bulb elongated, posterior one pyriform. Rectum longer than anal body width, anus large.

Excretory pore at the level of posterior part of isthmus or opposite junction of isthmus and posterior bulb. Anterior part of terminal excretory duct about 1.5  $\mu\text{m}$  diameter.

Vagina slightly less than half of body width. Anterior from uterus is a quadricolumella with four rows of four cells each, elongated spermatheca filled with sperm, oviduct, and ovary. One egg measured in uterus of female was 76  $\mu\text{m}$  long and 21  $\mu\text{m}$  wide.

Male with sexual dimorphism shown in stylet structure. Bursa crenated, adanal. Cloacal lips slightly protruded.

Type locality and habitat: *L. uliginosa* was collected in marsh soil rich in organic matter, in a forest close to Nieborów forest-guard house, Bartnica, Skierniewice province, central Poland. One male and one female were also collected at the southern end of Lake Galaduf near the village of Ozegary, Suwalki province, north-eastern Poland.

Type specimens are distributed as follow: female holotype male allotype, and 43 females and 18 males paratypes in the collection of the Research Institute for Vegetable Crops, Skierniewice, Poland. One female and one male paratype deposited in each of the following institutions: Nematology Department of the Agricultural University, Wageningen, the Netherlands; Nematology Department of the University of California, Davis, California, U.S.A.; U.S.D.A., A.R.S., Nematology Investigations, Beltsville, Maryland, U.S.A.

### *Discussion*

Nematodes of the family Nothotylenchidae, as outlined by Jai-rajpuri and Siddiqi (1969) and by Golden (1971), show more affinities to Tylenchidae than to Neotylenchidae. *Boleodorus* Thorne was already transferred to Psilenchinae, a subfamily of Tylenchidae

Table I - *Measurements of Lambertia uliginosa*.

	Females			Males		
	Holotype	22 Paratypes		Allotype	10 Paratypes	
		Mean	Variation		Mean	Variation
<i>Measurements in micrometers</i>						
Body length	878	920	857 - 1016	814	805	767 - 845
Annules width	1.5	1.5	1.4 - 1.7	1.5	1.5	1.4 - 1.7
Stylet length	14	14	13 - 15	14	14	14 - 15
Oesophagus length	124	135	128 - 144	131	123	118 - 129
Distance: head to excretory pore	111	111	103 - 116	108	109	99 - 115
Spicule length				22	22	21 - 22
Gubernaculum length				7	6	5 - 7
Tail length	164	168	149 - 184	168	163	149 - 178
<i>Ratios</i>						
a	34	33	29 - 37	42	42	35 - 52
b	7.1	6.8	6.2 - 7.4	6.2	6.6	6.0 - 7.0
c	5.4	5.5	5.0 - 6.1	4.8	5.0	4.7 - 5.3
V	59	59	57 - 61			
MB	41	44	42 - 46	43	45	42 - 48
Tail / anal body width	10.6	10.5	9.2 - 11.7			
Tail / vulva - anus distance	0.8	0.8	0.7 - 0.9			
Post-uterine sac / vulval body width	0.6	0.8	0.5 - 1.0			

(Geraert, 1971), and *Nothanguina* Whitehead was placed in Anguininae (Paramonov, 1970). *Lambertia* comes close to Tylenchinae by general morphology and by having amphids in the form of longitudinal slits, but differs mainly by the lack of valvae in the median oesophageal bulb. Therefore, it is tentatively placed in Nothotylenchidae, but further study of Tylenchidae - Nothotylenchidae complex may change the taxonomic position of this genus.

#### S U M M A R Y

The new genus *Lambertia* g. n. is erected for a species *L. uliginosa* sp. n. found in marsh forest soil of Poland. The genus combines characters of Tylenchinae and Nothotylenchinae, but because of lack of valvae in median oesophageal bulb is tentatively placed in Nothotylenchinae.

#### R I A S S U N T O

*Lambertia uliginosa* g.n., sp. n. (Nematoda, Nothotylenchidae)

Viene descritto il nuovo genere *Lambertia* per la nuova specie *L. uliginosa*, trovata in suolo paludoso in foreste della Polonia. Il genere comprende caratteri di Tylenchinae e Nothotylenchinae, ma poiché non ha valve nel bulbo mediano dell'esofago è collocato nella seconda sottofamiglia.

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