FIRST RECORD OF APOLONIINAE IN CHINA—*STRAELENSIA TIANI* SP. N.— WITH A REVISED DIAGNOSIS OF THE GENUS *STRAELENSIA* (ACARIFORMES: LEEUWENHOEKIIDAE)[1]

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ACARIFORMES
APOLONIINAE
STRAELENSIA
CHINA

ABSTRACT: A new species of the genus *Straelensia*, *S. tiani* sp. n., is described from hares in China. This is the first record of the subfamily Apoloniinae in this country. A revised generic diagnosis of the genus *Straelensia* is also given.

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RÉSUMÉ: Une espèce nouvelle du genre *Straelensia*, *S. tiani* sp. n., est décrite du lièvre en Chine. C'est la première fois qu'un Acarien de la sous-famille des Apoloniinae a été trouvé en Chine. Une diagnose révisée du genre *Straelensia* est également présentée.

Mites of the subfamily Apoloniinae have not previously been known in China (WEN, 1984). A new species of the genus *Straelensia* is described in this paper as the first record from this country. To date four species, including the new species described herewith, of the genus *Straelensia* were described and it becomes necessary to revise the generic diagnosis.

Genus *Straelensia* Vercammen-Grandjean & Kolebinova, 1968

Straelensia VERCAMMEN-GRANDJEAN & KOLEBINOVA, 1968: 253.

Type species: *Straelensia europaea* Vercammen-Grandjean & Kolebinova, 1968.

Diagnosis: SIF = 4Bs-B/N-3-1000.0000

Apoloniinae of small size. Legs short and slender. IP = 500-700. Peniscutum (PSc) with anteromedian projection (A) and one anteromedian seta (AM = 1). Legs P^1 and P^2 each with 2 tibialae (ti^1 = 2, ti^2 = 2) in short, bacilliform, located apically on tibiae I (T^1) and II (T^2). Single genuala I (g^1 = 1) short, g^2 = 0, g^3 = 0, and without tibialae III (ti^3 = 0) (fg/ti^3 = 1000). One microtibiala I (μti^1 = 1), but no microgenualae (μg) and mastisetae on leg III (P^3) (fm = 0000). Eye lenses (Oc) 2/2, separated by epiostracal pleats. Coxa II (Cx^2) with 2 coxalae (cx^2 = 2), the external one being shorter. Body setae numerous, including sternal setae (St) and ventral humeral setae (Hv). Gnathocoxa (Gx) with sinuous striations posterolaterally. Galeal seta branched or nude (gl = B/N). Palptarsus provided with 4 branched setae and a subterminala (fT° = 4Bs).

Geographical distribution: Ethiopian and

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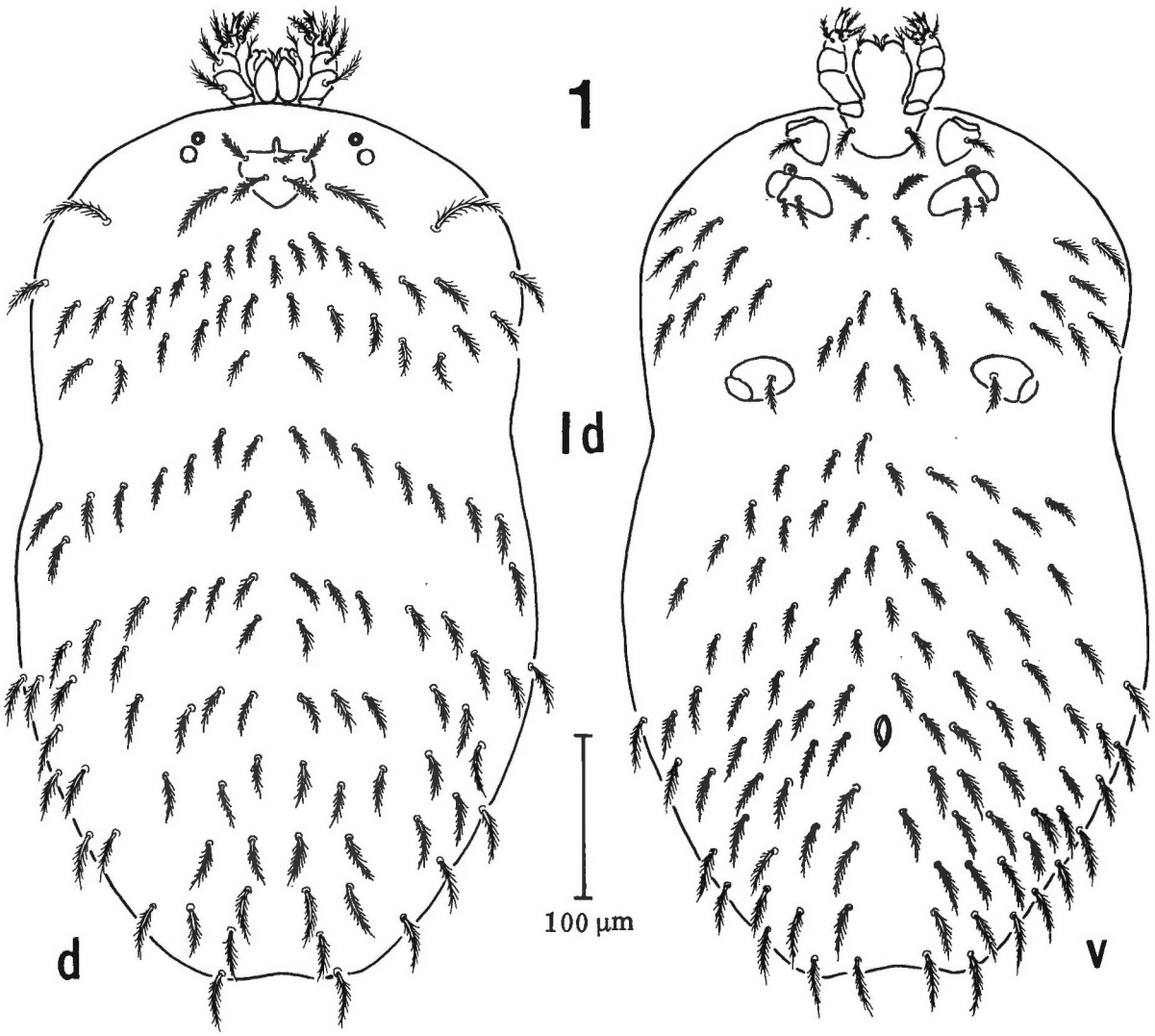

FIG. 1: *Straelensia tiani* sp. n.: idiosoma (id = idiosoma, d = dorsal view, v = ventral view).

Palaearctic Regions.

Hosts: Carnivora, Lagomorpha.

Included species:

S. africana Vercammen-Grandjean, 1971: South Africa (Transvaal), mongoose – *Herpestes sanguineus*;

S. europaea Vercammen-Grandjean & Kolebinova, 1968: Bulgaria, wolf – *Canis lupus*;

S. taurica Hushcha, 1975: Ukraine (Crimea), hare – *Lepus europaeus*;

S. tiani Wen, Tian, Guan & Wang, sp. n.: China (Shanxi), hare – *Lepus capensis*.

Straelensia tiani Wen, Tian, Guan & Wang, sp. n.
(FIG. 1-6)

Type material: Holotype (Ht) and 41 paratypes (Pt) *ex* hares *Lepus capensis* L. in Taihangshan Mountain area (1,500 m), Shanxi Province, China, Dec. 1984 and 5 May 1988, Q. TIAN and colleagues. Holotype and 23 paratypes deposited in the Medical Acarology Laboratory, Shanghai Medical University; 18 other paratypes deposited in the Department of Parasitology, Shanxi Medical College.

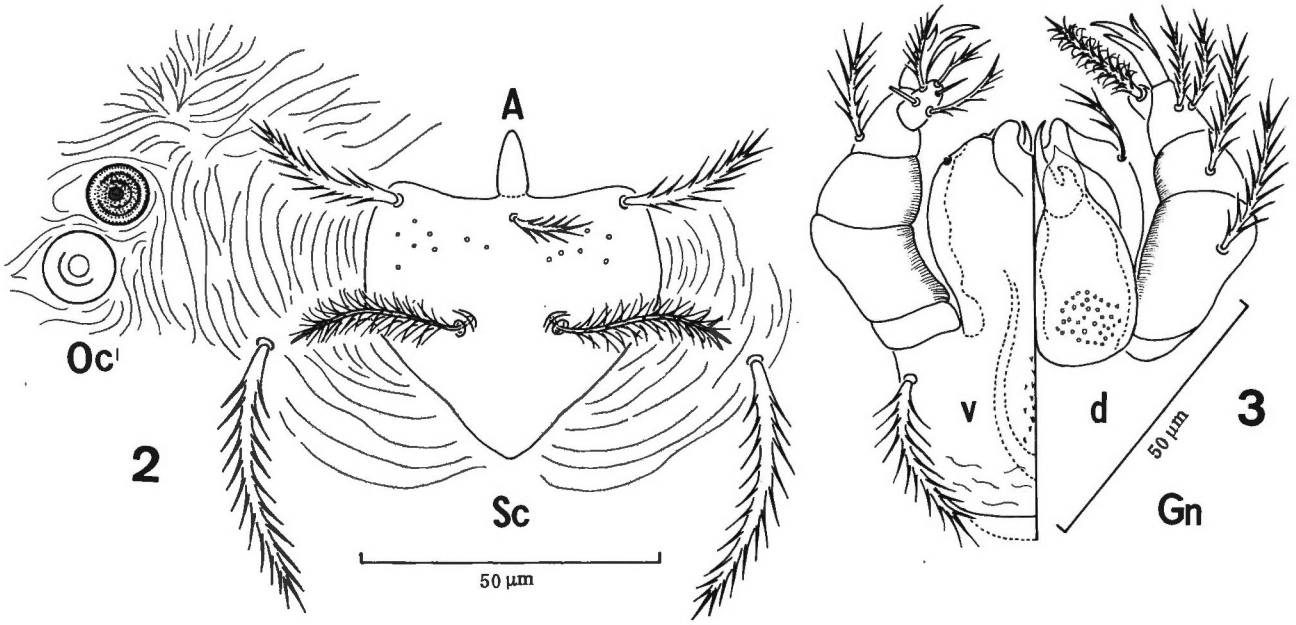

FIG. 2-3: *Straelensia tiani* sp. n.: gnathosoma and scutum. A = anterior projection; Gn = gnathosoma (d = dorsal left, v = ventral right); Oc = eyes; Sc = scutum.

Diagnosis: Small size, legs slender and short, gnathosoma (Gn) tiny, peniscutum (PSc) small, AM very short, body setae asymmetrically arranged. This new species is similar to *S. taurica* Hushcha, 1975, from which it can be distinguished by the following characters:

(1) Sternal setae more numerous, usually fSt: (2.2). (2.4.2)=12. St^1 composed of 2-3 sub-rows, and St^2 composed of 3-4 sub-rows (vs. fSt: 2.(2.4)=8); (2) scutum wider, AW 38, SB 19 (vs. 33 and 13, respectively); (3) body larger, Id = 530-689 × 324-516 (vs. 525-564 × 270-366); (4) IP = 631-693 (vs. 547-564); (5) cx^3 eccentrically located (vs. close to the proximal and anterior margin of Cx^3); (6) all specialized setae on legs longer; (7) ventral humeral setae (Hv) more numerous.

Description: SIF=4Bs-B_4-3-1000.0000; fp = B.B.BBB; IP = 665 (631-693); fSP = 7.7.7; PSc: Sh = −, A= +; Oc = 2/2 (A<P) fcx = 1.2.1; pc = +; fSt: (2.2).(2.4.2)=12(11-14); fRT = 1.1.1; ALs/AM, SB/PLs; fHv: 9/9 (4−11/6-12) = 18 (15-21); ($ps+s+pt^2$) = 0; PL>AL>>AM; fDS: 2+(17.9.8).(16.4).(16.8).(12.5).(26)=123; pt^1=N; fSc: AM+2AL (+2PL); fVS: 66 a 20 = 86; $t^1>t^2$, Vf = −; Sn: Fl; NDV = 12+18+123+86 = 239; ot = −; Chs = 0; Sg = −, Trc = −; fBP^1=1.1.5.4.8.18; fBP^2=1.2.4.4.6.15 (16); fBP^3= 1.2.3.3.6.12 (14).

Measurements (µm) (n=20):

	AW	SW	(PW)	SB	ASB	PSB	(AP)	AM	AL	PL	Sn	HS	DS	VS	St^1	St^2
Ht	38	50	(90)	20	21	23	(32)	13	24	43	30	38	40/28	20/32	20	22
Pt: m	35	45	(78)	18	20	19	(25)	11	24	43	29	35	33/28	18/27	15	19
M	43	58	(105)	21	25	25	(35)	16	30	50	36	42	40/38	23/33	22	23
$\bar{X}$	38	54	(95)	19	23	22	(30)	13	28	46	32	38	35/31	21/29	19	22

Id = 530-698 × 324-516 — Cx^1= 45 × 33 — T^1= 62 × 18 — P^1= 245 — Oca = 8
Gn = 83 × 81 — Cx^2= 54 × 25 — T^2= 48 × 17 — P^2= 200 — Ocp =10
Chs= 21 (20-23) — Cx^3= 50 × 26 — T^3= 53 × 15 — P^3= 220 — A = 13 × 5

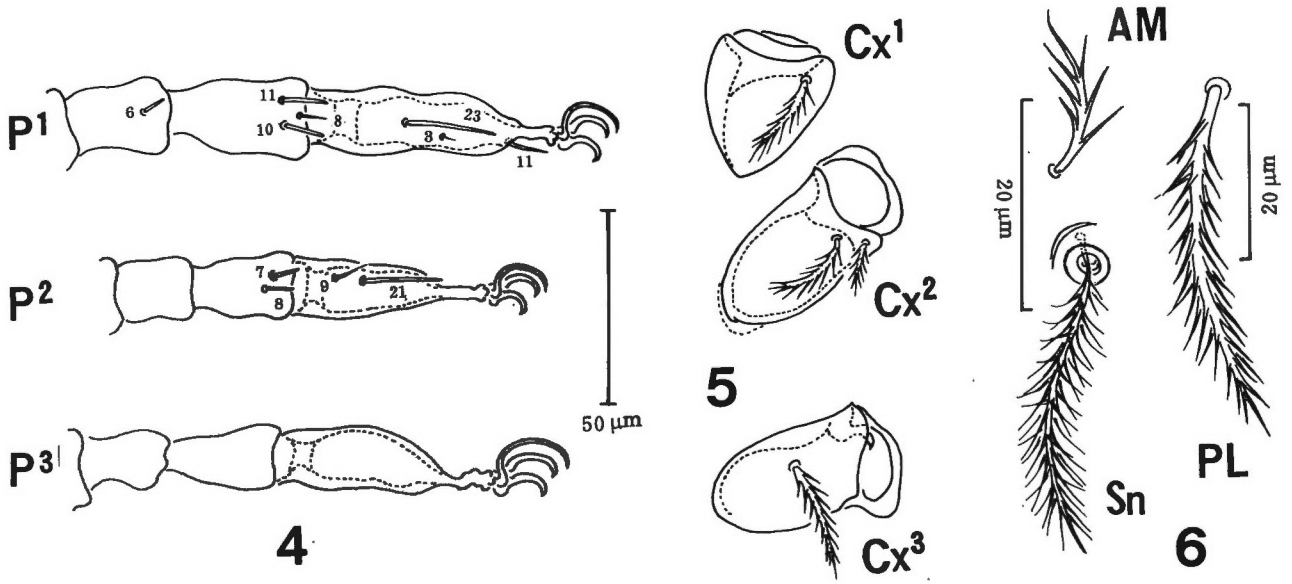

FIG. 4-6: *Straelensia tiani* sp. n.: setae on legs and scutum. AM = anteriomedian seta; $Cx^1 - Cx^3$ = coxae I – III; $P^1 - P^3$ = distal segments of legs, showing specialized setae; PL = posterolateral seta; Sn = sensilla.

Colour of larva greyish-yellow when alive, idiosoma elongated, elliptical, with a shallow constriction behind Cx^3. Epiostracal pleats fine. Weakly chitinized PSc pentagonal, surrounded by broad pleats, anteromedian projection (A) small (10-16 × 4-9), punctae (pc) extremely sparse, posterior angle covered by the pleats extending its full appearance after body engorged. Bothridium of the sensilla (SB) small. Sensilla (Sn) short and slender with long, fine, branched whorl. Eyes without ocular plates, separated by epiostracal pleats; lens of anterior eye (Oca) prominent and tomb-shaped, slightly smaller than posterior one (Ocp), which is almost flat. Body setae short with long barbs. HS longest. Dorsal setae arranged asymmetrically, first row subdivided into 3 sub-rows; 2nd to 4th rows each subdivided into 2. Ventral and caudal setae arranged irregularly. 60% of St^1 subdivided into 2 rows (2.2), 35% of the specimens with 2.2.1 or 2.1.2, and 5% with 2.2.2. St^2 composed of 5-11 setae, usually divided into 3 sub-rows (2.4.2). Ventral humeral setae (Hv) 7-10 unilaterally in the majority of specimens. Chelobase slender with chelostyle (Chs) tiny. Inner lateral surface of palpgenu and palptibia with fine, transverse striae. Gnathocoxa (Gx) with irregularly sinuous striae along posterolateral margin. Coxa II with 2 cx^2 of unequal length, parallel at the posterolateral angle of the segment, lengths of cx^1 25-30, cx^2 14-17 and 23-28, cx^3 25-27. Urstigma prominent, anteriad to Cx^2, with a sharp angle extending inwards. Tarsalae I (t^1) and II (t^2) long and slender.

Remarks: The geographical distribution of the new species is limited due to the host inhabiting the shrub forests along the lower slopes of Taihangshan Mountain. The mite larvae were collected from the body hairs of the hare, which is presumed to be only host species of the new mite. The parasite has been collected in large numbers on many occasions from the same hare species at same locality. A large number of rats was caught same time as the hares, without larvae of the new species being found on them.

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