

Curteria southcotti sp.n. from Poland with redescription of
C. episcopalis (C. L. KOCH, 1837) comb. nov.
(Acari: Actinedida: Erythraeidae).

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ABSTRACT. Slightly modified definition of the genus *Curteria* SOUTHCOTT, 1961 is proposed. *Curteria southcotti* sp. n. from Poland is described and illustrated. *Curteria episcopalis* (C.L. KOCH, 1837) comb. nov. is redescribed basing on A. C. OUDEMANS' determination. *Erythraeus flavus* OUDEMANS, 1903 syn. nov. is considered a nymph of *C. episcopalis*. All species of the genus *Curteria* described hitherto are compared and a set of dimensions is given as well.

Until now, nine genera of the so called, "conalae-less" *Erythraeinae* have been described: *Paraphanolophus* SMILEY, 1968, *Erythraxus* SOUTHCOTT, 1961, *Curteria* SOUTHCOTT, 1961, *Eatoniana* CAMBRIDGE, 1898, *Rainbowia* SOUTHCOTT 1961, *Erythrites* SOUTHCOTT, 1961, *Erythroides* SOUTHCOTT, 1961, *Erythrellus* SOUTHCOTT, 1961 and *Neosmaris* HIRST, 1926. However, the relationships within the group are still unclear and some genera are insufficiently defined and distinguished (GABRYŚ, 1991). The species discussed in the present paper have been placed in the genus *Curteria* according to SOUTHCOTT (1961a). The terminology is used after SOUTHCOTT (1960, 1961a,b,c, 1963, 1986) and GABRYŚ (1992). Some abbreviations need additional explanation: a/p O - diameters of anterior and posterior lenses and total length of double eye (only in the subfamily *Erythraeinae*); La (labialae) - setae connected with genital sclerite (g. s.) and paragenital sclerite (p. g. s.) of external genitalia (ExGLa) and anus (AnLa); Cl - claw, (e.g. PaTiCl - palptibial claw, TaCl - tarsal claw); IP (index pedibus) - the sum of total length of legs I-IV including coxae.

All dimensions in μm .

Table 1. Dimensions of *Curteria southcotti*, *C. curticristata*, *C. fagei*, and *C. graeca* (in μm). Additional explanations in the text

Characters	<i>C. southcotti</i> (Fem.) ZA/32/2 (holotype)	<i>C. curticristata</i> (Ad.?) (Willmann, 1951)	<i>C. curticristata</i> (N?) (Schweizer, 1951)	<i>C. fagei</i> (Ad.) (Cooreman, 1956)	<i>C. graeca</i> (Ad.) Beron, 1988
	1	2	3	4	5
LB	2590	1900-2600	1032	1600	-
WB	1540	1500-1700	680	-	-
ASRo	378	± 100	-	-	-
PSG	678	-	-	-	-
GAn	170	-	-	-	-
GOp	770	-	-	-	-
AnOp	490	-	330	-	-
MDS	44-92	± 27	20-28	45(70)	-
PDS	45-85	± 27	22-50	-	40-75
MVS	55-120	-	30-34	-	-
PVS	79-160	-	30-50	-	70-125
AL(n)	23	6?	4?6?	3	5-8
AL	90-140	-	47-57	100	-
ASens	178	-	81	-	-
PSens	190	-	91	-	-
CML	522	380-390	± 145	400	-
PSBp	66	-	6	-	-
ISD	405	-	-	-	-
ASBa	51	-	-	-	-
SBa	21	-	14	-	-
SBp	34	-	15	-	-
PSAL	74	-	45	-	-
PSAW	80	-	36	-	-
CMW	16-22	-	-	-	-
a	20	-	-	-	-
O	88	-	-	-	-
p	22	-	-	-	-
O-O	632	-	-	-	-
OCM	316	-	-	210	-
OAS	258	-	-	-	-
OPS	147	-	-	-	-
ExG(L)	382	-	-	-	300
ExGLa(L)	55-64	-	-	-	-
An(L)	87	-	47	-	-
AnLa(L)	45	-	-	-	-
Palps	-	-	-	-	-
PaFe(W)	180	-	75	-	-
PaGe(W)	100	-	42	-	-
PaTi(W)	63	-	42	-	-
PaTa(L/W)	103/40	-	48/26	-	-
PaTr(L)	100	-	48	-	-
PaFe(L)	253	-	103	-	-
PaGe(L)	134	-	57	-	-
PaTi(L)	118	-	52	-	-
PaTiCl(L)	24	-	22	-	-
L(sum)	629	-	282	-	-

Table 1 (continued)

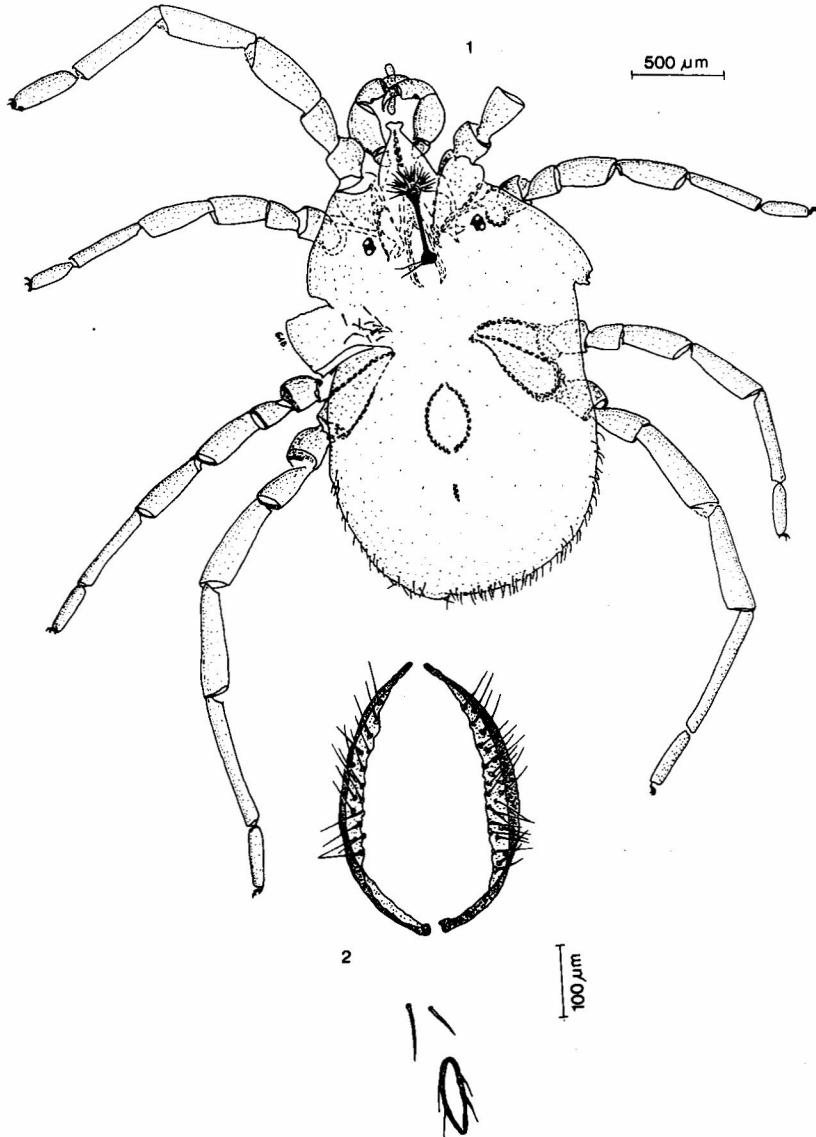
	1	2	3	4	5
Legs(L)					
I					
Cx	440	-	190	-	-
Tr	162	-	47	-	-
Bf	235	-	87	-	270-320
Tf	404	-	174	-	405-475
Ge	500	-	209	-	435-555
Ti	537	-	221	-	445-560
Ta	375	-	134	-	235-330
Ta(H)	118	-	61	-	-
L(sum)	2653	1605-2232	1062	2350-2500	-
II					
Cx	397	-	142	-	-
Tr	154	-	47	-	-
Bf	170	-	63	-	180-220
Tf	280	-	110	-	250-295
Ge	353	-	142	-	300-360
Ti	404	-	156	-	360-425
Ta	250	-	95	-	175-225
Ta(H)	75	-	40	-	-
L(sum)	2008	-	755	1550-1600	-
III					
Cx	441	-	134	-	-
Tr	162	-	43	-	-
Bf	184	-	59	-	195-235
Tf	338	-	126	-	295-360
Ge	397	-	142	-	355-425
Ti	478	-	197	-	445-525
Ta	272	-	99	-	205-235
Ta(H)	74	-	34	-	-
L(sum)	2272	-	800	1850-2000	-
IV					
Cx	530	-	166	-	-
Tr	220	-	67	-	-
Bf	257	-	47	-	260-295
Tf	537	-	182	-	505-575
Ge	573	-	201	-	555-640
Ti	713	-	248	-	660-775
Ta	330	-	114	-	230-295
Ta(H)	74	-	39	-	-
L(sum)	3160	1655-2573	1025	2850-3000	-
IP	10093	-	3642	-	-

Genus *Curteria* SOUTHCOTT, 1961

Synonyms: see SOUTHCOTT, 1961a.

Type species (original designation): *Morieria curticristata* WILLMANN, 1951.

Definition: Adult and nymph with two eyes on each side, these placed at the level of posterior half of crista metopica. Crista metopica present but the anterior sensillary



1-2. *Curteria southcotti* (F, holotype); 1 - general view, 2 - genital-anal region

area tends to get reduced (border-line between anterior sensillary area and shield indistinct). Anterior sensillary area well behind rostrum. Dorsal idiosomal setae and leg setae always simple, spiniform. Legs without specialized serrate setae (serratae). Palps without specialized cone-like setae (conalae).

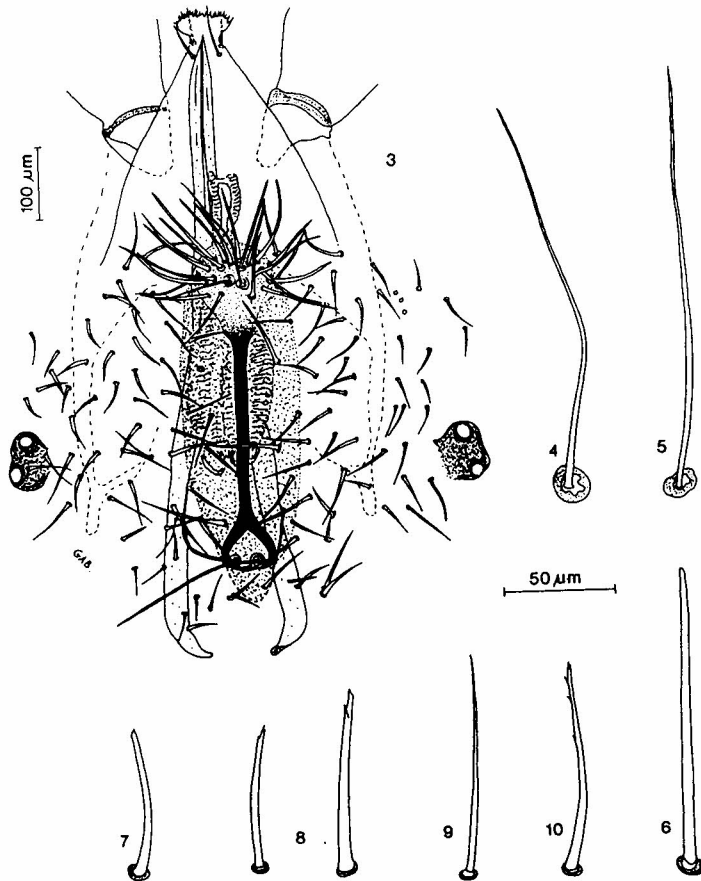
Known only from Europe.

Larva: not known.

Curteria southcotti sp. n.

(figs. 1-15, tab. 1)

Type material. Holotype: female (PL/ZA/32/2), collected on 9 June 1987 in Biała Góra near Tomaszów Lubelski (Zamość District), SW slope, beneath the summit, in



3-10. *Curteria southcotti* (F, holotype); 3 - crista metopica region, 4 - ASens seta, 5 - PSens seta, 6 - AL seta, 7 - middorsal seta (MDo), 8 - postdorsal setae (PDo), 9 - midventral seta (MVe), 10 - postventral seta (PVe)

Table 2. Dimensions of *Curteria episcopalis* and *Erythareus flavus* (= *C. episcopalis* - nymph). Additional explanations in the text.

Characters	Male GD/4/5	Male KI52/1	Male WR40/6	Male ZA39/8	Female GD/3/1	Female KI/56/1	Female WR40/8	Female ZA39/7	Nymph E. flavus
	1	2	3	4	5	6	7	8	9
LB	1694	1510	1586	1478	2200	1140	1617	1463	960
WB	1232	1016	1155	924	1463	770	1047	909	570
ASRo	246	187	104	143	231	169	218	216	-
PSG	441	336	514	375	544	201	355	367	-
GAn	134	107	145	146	221	38	118	55	-
GOp	426	415	415	415	720	194	425	316	-
AnOp	241	237	247	205	382	84	213	182	-
MDS	36-79	44-93	40-111	42-93	49-103	49-109	50-118	49-118	-
PDS	54-101	69-113	50-105	48-103	79-109	58-129	69-125	65-140	to 80
MVS	34-60	48-70	38-58	42-63	30-97	40-60	49-89	47-100	-
PVS	32-84	45-93	36-70	49-95	49-91	48-82	69-123	65-113	-
AL(n)	6	6	8	7	8	8	9	8	3
AL	82-117	79-113	74-113	79-119	81-129	89-137	97-141	93-152	70-76
ASens	128	140	130	136	150	152	142	140	95
PSens	-	-	150	158	-	170	168	168	-
CML	308	320	292	328	395	320	344	328	-
pSBp	8	8	8	8	14	8	10	16	-
ISD	265	284	252	286	342	292	302	276	175
ASBa	35	28	32	34	39	20	32	34	-
SBa	9	12	-	19	16	17	15	18	-
SBp	21	20	20	23	18	22	25	-	-
PSAL	50	51	51	58	71	51	59	63	-
PSAW	51	51	44	51	53	44	51	44	-
CMW	8	8	8	6	6-10	8-10	6-10	8	-
a	20	26	22	20	24	18	18	20	-
O	64	69	67	63	73	63	63	69	-
p	20	26	24	20	22	20	20	28	-
O-O	368	308	374	338	-	254	356	292	-
OCM	184	154	187	169	249	127	178	146	-
OAS	192	174	193	191	-	166	207	169	-
OPS	73	110	59	95	-	126	95	107	-
ExG(L)	280	276	245	252	367	276	328	288	-
ExGLa	35-44	33-40	31-44	36-42	43-48	45-50	43-52	43-50	-
An(L)	87	83	79	71	113	80	83	79	-
AnLa(L)	-	-	45-48	-	48-62	-	52	62	-
PaGM									
PaFe(W)	117	117	111	113	129	119	129	123	-
PaGe(W)	73	70	65	65	83	73	79	61	-
PaTi(W)	47	49	45	45	55	51	51	50	-
PaTaL/W	69/36	79/36	67/32	66/34	83/36	70/36	85/38	73/34	-
PaTr(L)	50	50	50	50	70	60	60	61	-
PaFe(L)	158	148	160	148	190	166	174	172	-
PaGe(L)	79	88	79	77	95	87	87	85	-
PaTi(L)	67	81	67	69	85	79	90	77	-
PaTiCl	28	26	28	28	30	29	29	30	-
L	382	393	384	372	470	421	440	425	-

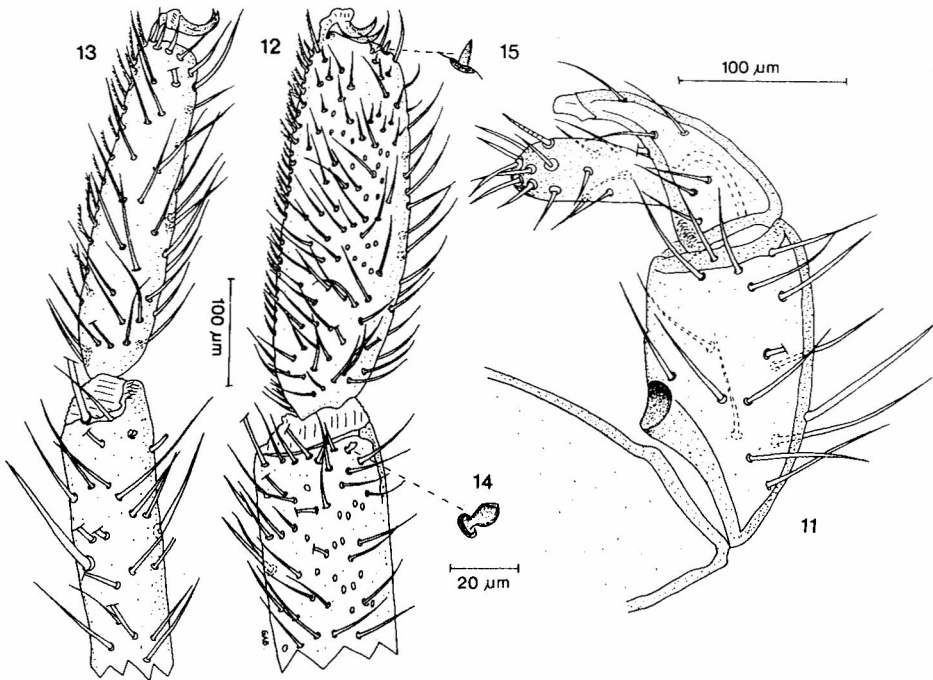
Table 2 (continued)

	1	2	3	4	5	6	7	8	9
Legs(L)									
I									
Cx	257	287	294	287	367	316	331	323	-
Tr	95	110	88	95	125	95	110	118	-
Bf	132	154	154	176	198	162	184	176	-
Tf	308	301	323	316	390	323	367	345	-
Ge	345	390	345	360	426	382	426	390	-
Ti	352	382	353	360	470	397	412	375	-
Ta	228	272	250	228	294	250	265	257	-
Ta(H)	103	90	96	95	110	101	100	103	-
L(sum)	1717	1896	1807	1822	2270	1925	2095	1984	1160
II									
Cx	250	257	257	250	316	272	294	287	-
Tr	95	88	80	88	103	88	110	95	-
Bf	88	103	95	103	103	103	110	118	-
Tf	184	184	170	184	213	191	206	206	-
Ge	206	227	213	213	250	220	257	235	-
Ti	242	264	242	235	294	257	279	250	-
Ta	154	161	170	152	206	162	184	162	-
Ta(H)	66	66	59	59	66	66	66	66	-
L(sum)	1219	1284	1227	1225	1485	1293	1440	1353	820
III									
Cx	242	257	250	235	309	250	294	279	-
Tr	95	98	95	88	132	103	118	103	-
Bf	95	103	103	103	118	110	125	125	-
Tf	206	220	206	198	257	220	243	228	-
Ge	235	280	242	228	294	265	294	279	-
Ti	294	316	280	287	345	294	331	294	-
Ta	162	184	182	162	206	170	191	184	-
Ta(H)	51	59	51	51	59	59	59	59	-
L(sum)	1329	1458	1358	1301	1661	1412	1596	1492	880
IV									
Cx	323	345	345	316	426	351	412	375	-
Tr	132	154	132	125	162	125	147	170	-
Bf	140	147	147	147	147	154	162	176	-
Tf	360	375	353	338	441	382	434	397	-
Ge	390	426	345	367	448	404	470	412	-
Ti	420	434	375	397	507	456	478	441	-
Ta	206	220	206	187	257	191	235	206	-
Ta(H)	51	53	53	51	63	59	59	59	-
L(sum)	1971	2101	1903	1877	2388	2063	2338	2177	1230
IP	6236	6739	6295	6225	7804	6693	7469	7006	4090

the patch of xerothermic vegetation with *Anemone silvestris* on lime soil; coll. G. GABRYŚ; sifted sample; specimen mounted in Faure-Berlese liquid; deposited in author's collection.

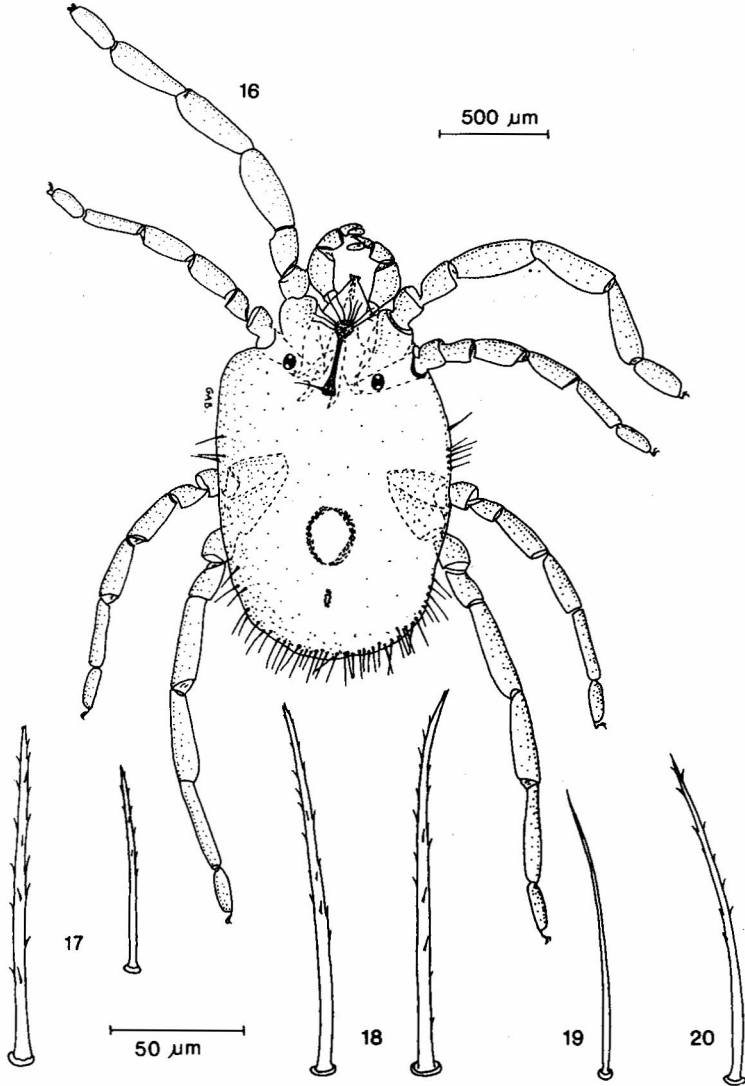
DIAGNOSIS: (dimensions in table 1).

Big, oval (fig. 1), brown with no metallic lustre in lifetime; palptibia strongly elongate, narrowing and bent at the top, crescent cavity in proximal-ventral part of palpgenu distinct, palptarsus elongate and clavate (fig. 11); dorsal setae uniform in structure, smooth, spiniform, sharpened at the top, some distally divided into two or three unequal parts (figs. 7, 8); all setae flexible and form a "velvet-like" cover of the body; anterior area of crista metopica with unclear borders and bears 23 smooth nonsensillary setae AL (figs. 3,6); ASens and PSens long, smooth, narrow and of similar length (figs. 3-5); ventral setae longer than dorsal ones, awl-shaped (figs. 9, 10); tarsi of all legs long and narrow and their height (H) is not greater than width of respective tibiae (figs. 1, 12, 13); dorso-distal half of tibia I bears numerous spinalae instead of typical scobopedalae (fig. 12); vestigialae barrel-shaped and distributed on (in brackets, length in μm): Ti I (9), Ge I (10), Ge II (11).



11-15. *Curteria southcotti* (F, holotype); 11 - right palp (medially), 12 - left tarsus I and part of tibia I (posteriorly), 13 - left tarsus IV and part of tibia IV (posteriorly), 14 - vestigiotibial (VsTi) I, 15 - famulus I

Curteria southcotti sp. n. differs from the remaining species in body size (comparable only with *C. curticristata*), structure and length of crista metopica, length of ASens and PSens, great number of nonsensillary setae AL (23!), structure and length of palps, length of legs - particularly of IVth pair which is remarkably longer than body and legs I, structure of dorsal setae which are almost completely smooth, strong, spiniform but not rigid and not longer than $95\mu\text{m}$, structure of vestigialae which are short and dumpy (barrel-shaped). See also "Remarks on taxonomy".

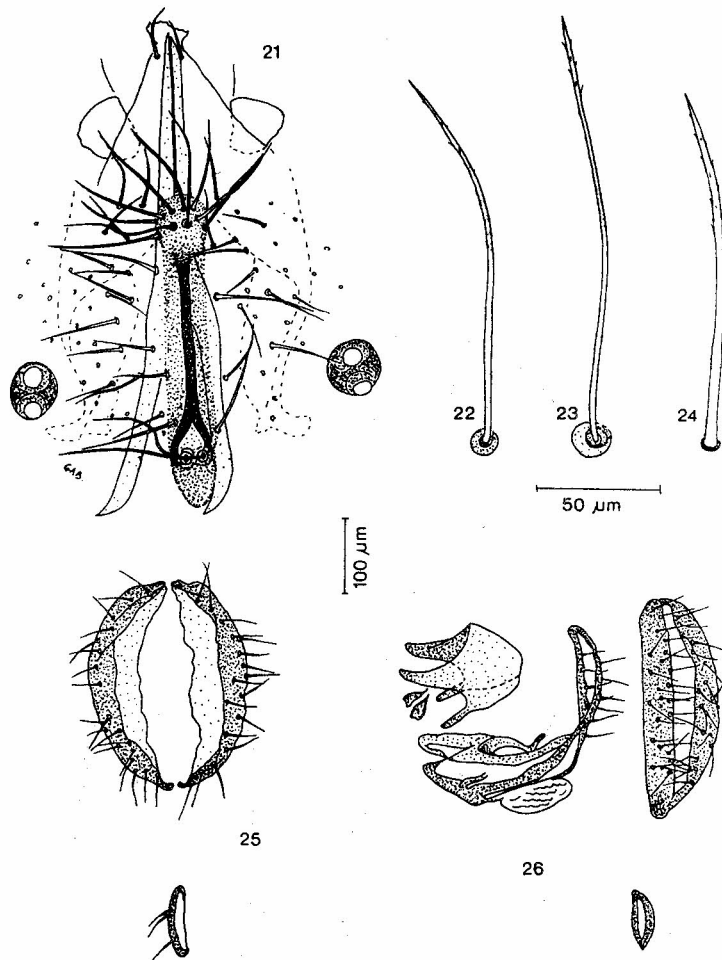


16-20. *Curteria episcopalis* (F); 16 - general view, 17 - middorsal setae (MDo), 18 - postdorsal setae (PDo), 19 - midventral seta (MVe), 20 - postventral seta (PVe)

DESCRIPTION: (based on the holotype - dimensions given in table 1)

Female. Big, oval (fig. 1), slightly flattened laterally, brown without metallic lustre in lifetime; gnathosoma, legs and genital-anal region strongly sclerotized; densely covered with dorsal and ventral setae.

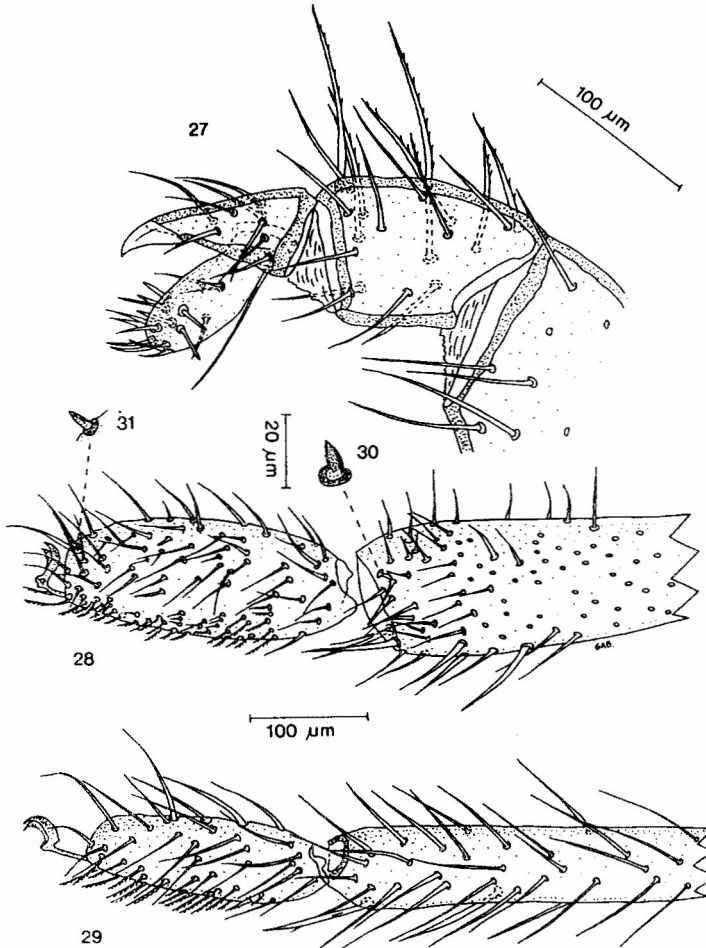
Gnathosoma. Rostrum typical, strongly sclerotized, bearing (mostly on ventral side) not numerous, smooth setae, with membranous, fan-shaped structure (fan) at the top (fig. 3). This fan, with numerous sharp and long dents in anterior part, probably of sensory nature, occurs in all *Erythraeidae* and is rather an insignificant structure from taxonomical point of view. Chelicerae typical, dagger-shaped, retractable into idiosoma (fig. 3). Palps strong but slim, palpfemur swollen in middle, palpgenu



21-26. *Curteria episcopalis* (F, except 26); 21 - crista metopica region, 22 - ASens seta, 23 - PSens seta, 24 - AL seta, 25 - genital-anal region (F), 26 - genital-anal region (M) with internal genital sclerite

ensiform with characteristic, strongly sclerotized crescent cavity at proximal-ventral side, palptibia elongate, narrowing distally and bent, with a claw bearing a denticle at the base (both claws of the holotype strongly effaced); palptarsus elongate, clavate but ventral side flat and dorsal side slightly convex, rounded apically with numerous solenidia; all palp articles covered with long, smooth and apically sharpened setae; no conalae (fig. 11).

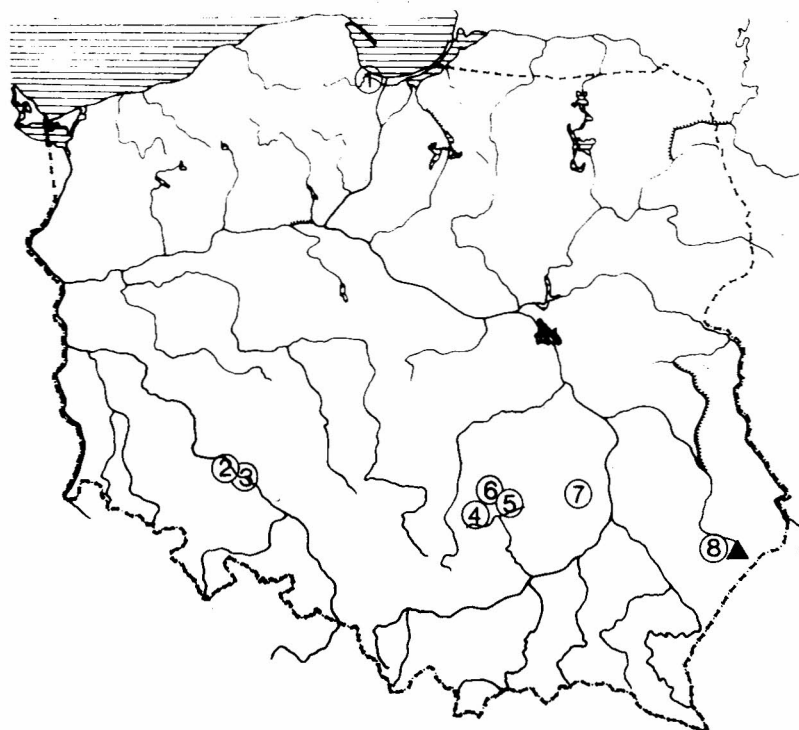
Dorsal side. Aspidosoma not clearly distinguished from opisthosoma, all dorsum covered with dense, uniform in structure, smooth, apically sharpened, spiniform setae, some of which slightly divided into two or three unequal adjoining parts at the top (figs. 7, 8); these setae are flexible (contrary to spiniform, rigid setae of *C. episcopalis*) and not longer than 95 μm (ranges are given in table 1). Crista metopica



27-31. *Curteria episcopalis* (F); 27 - right palp (medially), 28 - left tarsus I and part of tibia I (posteriorly), 29 - left tarsus IV and part of tibia IV (posteriorly), 30 - vestigiotibiala (VsTi) I, 31 - famulus I

relatively short (fig. 1), located on scutum, the posterior part of which forms a cuneate process reaching behind posterior sensillary area; the posterior sensillary area almost completely sclerotized, onion-shaped (fig. 3), with two very long, narrow, smooth, apically sharpened and flexible sensillary setae PSens (fig. 5); rod of crista metopica ensiform, the sclerotization of its anterior part fading, therefore the borders of anterior sensillary area are indistinct (as in all species of this genus) (fig. 3). The anterior sensillary area bears two long sensillary setae ASens (fig. 4) which are similar in structure to PSens and 23 nonsensillary setae AL which are smooth and longer and slimmer than dorsal setae (fig. 6). The double and almost sessile eyes are placed on sclerotized knob at both sides of crista metopica at 1/4 length from its posterior end (fig. 3).

Ventral side. Ventral setae considerably longer than the dorsal ones, particularly in posterior part of opisthosoma, different in structure - narrower, longer and less flexible, awl-shaped (figs. 9, 10). Genital opening surrounded by ribbon-like valves (para-genital- and genital sclerite are difficult to distinguish), labialae similar in structure to dorsal setae but always shorter. Anus strongly sclerotized, AnLa similar to ExGLa but slightly shorter (fig. 2).



Localities of *Curteria southcottii* (triangle) and *C. episcopalis* (circles) in Poland. Numerals correspond to the list of localities in the text.

Legs. Strong and long, proportional, epimera strongly sclerotized; remarkable are very narrow and long tarsi of all legs (even I), not wider than respective tibia (holotype lacks right leg I); Legs IV longer than remaining ones, legs I of body length, Legs II and III the shortest, of similar length (fig. 1). Segments of all legs covered with smooth, spiniform, flexible scobopedalae which are much stronger on ventral side; scobopedalae in distal parts of genua and tibiae (II-IV) form characteristic spurs (fig. 13). Distal half of dorsal side of tibia I bears very soft setae of spinalae type instead of typical scobopedalae (fig. 12); solenidia numerous, especially on tarsi; setae which form the "brush" on tarsus I considerably shorter than on other tarsi; all tarsi with two claws on stalk (figs. 12, 13). Tarsus I with conical famulus (8 μ m) anterodorsodistally (fig. 15); vestigialae characteristic, barrel-shaped in posterodorsodistal parts: Ti I (9 μ m) (fig. 14), Ge I (10 μ m) and Ge II (11 μ m, less expanded).

Male: unknown.

Nymph: unknown.

Etymology. This species is dedicated to the outstanding specialist in *Erythraeidae*, doctor R. V. SOUTHCOTT, Mitcham, South Australia.

In the collection of A. C. OUDEMANS (Leiden) there are deposited 2 specimens (on two slides) which are determined as "*Erythraeus episcopale*. C. L. KOCH, Loordninen, Vantasselt, Museum Leiden, Verz. A. C. OUDEMANS, cat. No 1" (and 2 respectively). After examination the specimens appeared to be conspecific with commonly occurring species in Poland which I have included in the genus *Curteria*. The original description (C. L. KOCH, 1837 [after Oudemans, 1937]) contains several remarks which allow to confirm the OUDEMANS' determination: "... Die Papillen lang, ziemlich dicht, am Ende borstenförmig spitz, etwas einwärts gekrümmt. Der Rüssel nicht sehr lang. Die Taster von gewöhnlicher Länge, etwas dick, wenig borstig, der Nagel des Endgliedes lang, der Anhängsel dünn, lang, am Nagel anliegend, daher schwer zu sehen. Die Vorder- und Hinterbeine gleichlang, kürzer als der Körper; die vier Mittelbeine beträchtlich kürzer als diese; das Endglied an allen kurz und gewölbt; alle ziemlich dicht behaart, mit einzelnen rechtwinkelig abstehenden sehr feinen Härchen. Die Augen ziemlich gross". Although KOCH did not point that eyes are double he called them "quite big". Actually, in the genus *Curteria*, although eyes are double (big) the single lenses are difficult to distinguish. At the same time, the C. L. KOCH drawing resembles *Curteria* from Poland in shape. To protect the old name, I decided to include the specimens from Holland and Poland in the species *Curteria episcopalis* (C. L. KOCH, 1837) and redescribe the species basing on specimens from Poland (the specimens from Holland are in a very bad shape).

OUDEMANS (1903) gave a short description of *Erythraeus flavus* and a year later (OUDEMANS, 1904) he published a detailed description and figures. After examination of the type specimen (on two slides, determined as "*Erythraeus flavus* OUDMS Nph II, Eil Borkum 1900 Prof. Dr. Oskar SCHNEIDER, Mus. Leiden" etc., 1 and 2 respectively) it appeared that *E. flavus* is a nymph of *C. episcopalis* therefore it is assumed a synonym. The dimensions of *E. flavus* are given in table 2.

Curteria episcopalis (C.L. KOCH, 1837) comb. nov.

(figs. 16-31, tab. 2)

Erythraeus flavus OUDEMANS, 1903 syn. nov.

DIAGNOSIS: (dimensions in table 2).

Female: medium size, body oval, "shoulders" indistinct (fig. 16), metallic green in lifetime; palps strong, covered with smooth and long setae, in proximalventral part of palpgenu characteristic crescent cavity, palptibial claw with small denticle on ventral side (at base) (fig. 27); crista metopica relatively short (fig. 16), placed on narrow scutum the distal part of which forms a cuneate process reaching beyond the posterior sensillary area; anterior sensillary area rounded, weakly sclerotized, partly diffused with scutum (fig. 21); nonsensillary setae AL long, strong, slightly setulose (fig. 24); sensillary setae ASens and PSens long and relatively thick, slightly setulose (ASens only slightly thinner than the thinnest AL), ASens always a little shorter than PSens (figs. 22, 23); dorsal setae uniform in structure but vary in thickness and length: rigid, strong, slim spiniform, narrowing apically and almost sharpened, almost smooth in proximal part, in distal part more densely covered with almost adhering setulae (figs. 17, 18); ventral setae similar but remarkably thinner, needle-like and slightly shorter (figs. 19, 20); in posterior part of opisthosoma, longer setae predominate (both, dorsal and ventral); legs relatively short, I and IV of similar length and longer than II and III (fig. 16), all covered with uniform, spiniform scobopedalae (figs. 28, 29), on I and II considerably stronger and more rigid on dorsal side; tibia IV slightly longer than genua IV, tarsi slim and elongate as high (H) as respective tibiae are wide; tarsus I with conical famulus ($7\mu\text{m}$) in dorsodistal part (fig. 31), vestigialae slightly expanded, spadiceous and placed individually in dorsodistal parts of Ti I ($9\mu\text{m}$) (fig. 30), Ge I ($9\mu\text{m}$) and Ge II ($8\mu\text{m}$).

Male: body shape and size like in the female; it has a strongly sclerotized "penis" (i.e. internal genital sclerite), slightly differs in body dimensions (table 2) and appearance of external genitalia (figs. 25, 26).

Localities in Poland:

1. Gdańsk-Górki Wsch.: lake outwash, 9.VII.1986, coll. W. JĘDRYCKOWSKI, 1F; pine forest on sand dunes, 2-14.VII.1986, coll. W. JĘDRYCKOWSKI, 1M.
2. Wrocław-Mokry Dwór: meadow and road sides, 21.VI.1987, coll. L. BOROWIEC, 3M, 3F; concrete plates covered by moss + grass in the meadow, moist, 26.VI.1987, coll. L. BOROWIEC, 1M, 2F; meadow, 12.VII.1987, coll. L. BOROWIEC, 1M.
3. Radwanice near Wrocław: concrete plates covered by moss, near the pond, 8.VII.1984, coll. L. BOROWIEC, 9F; meadow, 15.VI.1986, coll. L. BOROWIEC, 3F.
4. Reserve "Milechowy" near Chęciny: xerothermic clearing in the *Thalictro-Sglvietum*-like plant community, NNW of *Tilio-Carpinetum*, 20.V.1982, coll. A. KAZMIERSKI and W. NIEDBAŁA, 2M.
5. Świętokrzyskie Mts.: Łysica peak, treeless rocky slope, 22.V.1982, coll. A. KAZMIERSKI and W. NIEDBAŁA, 1F.
6. Świętokrzy-

ska Forest: reserve "Dalejów", *Dentario-glandulosae Fagetum* with *Larix polonica*, 19.V.1982, coll. W. NIEDBAŁA and A. KAŹMIERSKI, 1M. 7. Szewna near Ostrowiec Świętokrzyski: slope on Kamionka river, bushes, litter, 27.VI.1983, coll. W. JĘDRYCKOWSKI, 1F. 8. Józefów: private quarries, xerothermic flora, meadows, from turf and moss, 12.VI.1987, coll. G. GABRYŚ, 2M, 1F.

REMARKS ON TAXONOMY

SOUTHCOTT (1961a) gave a comprehensive analysis of the following genera: *Erythrolophus* BERLESE, 1920 (non *Erythrolophus* SWINHOE, 1892), *Morieria* OUDEMANS, 1941 and *Coerythrolophus* RADFORD, 1950. The cited author recognized those names as invalid and suggested the new name, *Curteria* with type species *Morieria curticristata* WILLMANN, 1951. BERON (1988), in the chapter "The *Morieria* - *Curteria* problem" presented the most important steps of studies on the genera listed above and, recognizing the revision by SOUTHCOTT (1961a), named the new species *Curteria graeca*. Considering the works of SOUTHCOTT (1961a) and BERON (1988) and the authors' studies it seems reasonable to include the following five species in the genus *Curteria*: *C. curticristata* (WILLMANN, 1951), *C. episcopalis* (C.L. KOCH, 1937) comb. nov., *C. fageli* (COOREMAN, 1956), *C. graeca* (BERON, 1988) and *C. southcotti* sp. n.

The collection of BERLESE (Florence) contains several specimens which undoubtedly belong to "conalae-less" *Erythraeinae* but the very bad condition of these specimens does not allow unquestionable classification within *Curteria*. They are as follows (numbers in the brackets follow the catalogue of CASTAGNOLI and PEGAZZANO, 1985): *Erythraeus calvescens* (34/48), *E. flavus* juv. (214/41), *E. (Erythrolophus) froggatti* (215/5), *E. impectus* (51/18, 51/22), *E. (Erythrolophus) mollis* (220/49, 220/50, 221/1). *Erythraeus froggatti* (98/36) is a larva of *Erythraeus*. In the collection of OUDEMANS (Leiden) there are no other "conalae-less" *Erythraeinae* besides *C. episcopalis* and *E. flavus*.

Morieria curticristata WILLMANN sensu SCHWEIZER (1951) and SCHWEIZER and BADER (1963) seems to be conspecific with *C. curticristata* (WILLMANN, 1951) in spite of doubts of author of the species himself. The works of SCHWEIZER (1951) and SCHWEIZER and BADER (1963) throw some light on the reasons why WILLMANN (in correspondence with J. SCHWEIZER) considered *Morieria curticristata* sensu SCHWEIZER (1951) a different species from *Morieria curticristata* WILLMANN, 1951. The single specimen collected by SCHWEIZER in Switzerland was a nymph just after moulting and, moreover, it was partly destroyed during preparation. SCHWEIZER however, although he knew WILLMANN'S doubts, decided to support his previous determination (see: SCHWEIZER and BADER (1963) page 312: "Bemerkungen des Herausgebers:..."). I have studied SCHWEIZER'S specimen and I am also of the opinion that both descriptions refer to the same species which is characteristic in having very short idiosomal setae which distinguish it from the remaining species of this genus. The locality of *C. curticristata* from Greece (COOREMAN, 1955) is doubtful and I think that the author collected a

different species. If it really was *C. curticristata* then WILLMANN was wrong when he wrote about its high alpine ("hochalpine") distribution.

Curteria fageli (COOREMAN, 1956) is a good species but needs a detailed redescription.

In tables 1 and 2 there are given the dimensions of the hitherto described species. The data on *C. curticristata* (WILLMANN, 1951), *C. fageli* (COOREMAN, 1956) and *C. graeca* BERON, 1988 are given from literature. The symbols at *C. episcopalis* and *C. southcotti* denote specimens from the author's collection.

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