

Genus	Vol. 2(4): 357-361	Wrocław, 15 III 1992
-------	--------------------	----------------------

Notes on the morphological terminology of *Erythraeidae*
(*Acari: Actinedida: Parasitengona*)

GRZEGORZ GABRYŚ

Agricultural University of Wrocław, Department of Zoology, Cybulskiego 20,
50-205 Wrocław, Poland

ABSTRACT. A uniform description system of postlarval *Erythraeidae* morphology is suggested. Crista metopica with adjacent structures and idiosoma are considered. Some new terms are introduced.

The current scheme of description of erythraeid mite morphology is based mainly on works of SOUTHCOTT (1960, 1961a, b, c, 1963 and later). This scheme refers mainly to larval stages. In the family *Erythraeidae*, like in the remaining *Parasitengona*, the larvae are heteromorphic. Therefore it is necessary to specify the system of description and measurements also for active postlarval stages (nymphs and adults). However, the names and measurement terms of homologous structures should remain unchanged to limit the number of new terms and to maintain the nomenclature unity within *Parasitengona*.

It is obvious that no new and separate nomenclature systems should be introduced for small taxa. However, there are still some specific features which distinguish taxa and these need a very precise description. The terms listed below refer mainly to such specific structures in postlarval *Erythraeidae*.

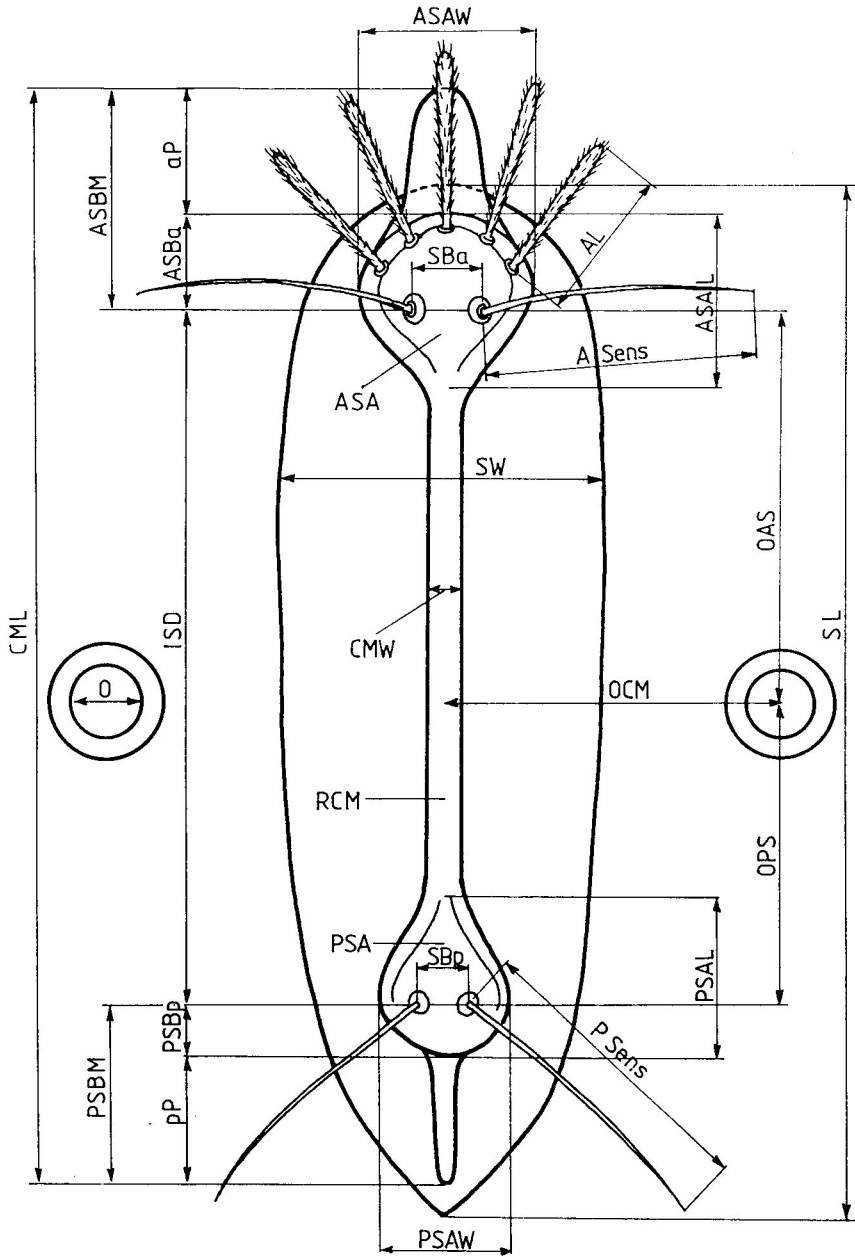
The abbreviations are arranged alphabetically. Some terms and abbreviations are introduced by the author. When nymphs are considered external genitalia (ExG) should be replaced by urvulva (Uv) (these cases are indicated with an asterisk). Each term is illustrated (figs. 1-3).

AL - nonsensillary setae on anterior sensillary area or their length (fig. 1).

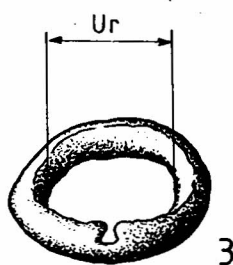
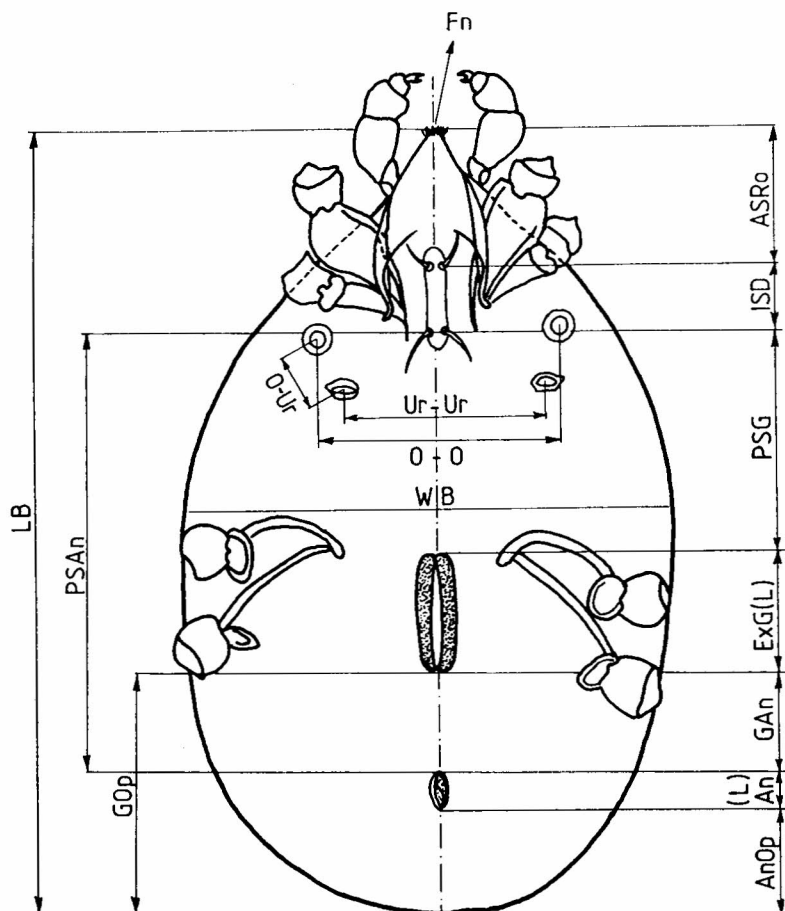
An(L) - length of anus (fig. 2).

AnOp - distance between posterior edge of external anal sclerite and posterior edge of opisthosoma (fig.2).

aP - anterior process of crista metopica or its length (fig. 1).



1. Crista metopica with adjacent structures



2

3

2. Idiosoma; 3. Urnula

- ASA** - anterior sensillary area of crista metopica (fig. 1).
- ASAL** - length of anterior sensillary area of crista metopica excluding anterior process (fig. 1).
- ASAW** - width of anterior sensillary area of crista metopica (fig. 1).
- ASBa** - perpendicular distance between line of centres of anterior sensillae bases and anterior edge of crista metopica excluding anterior process (fig. 1).
- ASBM** - perpendicular distance between line of centres of anterior sensillae bases and anterior edge of anterior process (fig. 1) (introduced by FAIN *et al.*, 1987).
- ASens** - anterior sensillae or their length (fig. 1) (Sens = SE in SOUTHCOFF, 1986 and later papers).
- ASRo** - perpendicular distance between line of centres of anterior sensillae bases and anterior edge of rostrum, including fan (Fn), excluding chelicerae (fig. 2).
- CML** - total length of crista metopica measured by distance between anterior and posterior edges, including anterior and posterior processes (fig. 1).
- CMW** - width of crista metopica measured at the level of the rod (RCM)(fig. 1).
- ExG(L)*** - length of external genitalia measured by distance between anterior and posterior edges of external genital sclerite (fig. 2).
- Fn** - fan; specific membranous structure at the top of rostrum (fig. 2).
- GAn*** - distance between posterior edge of external genital sclerite and anterior edge of external anal sclerite (fig. 2).
- GOp*** - distance between posterior edge of external genital sclerite and posterior edge of opisthosoma (fig. 2).
- ISD** - perpendicular distance between lines of centres of anterior sensillae bases and posterior sensillae bases (figs. 1, 2).
- LB** - length of body measured by distance between top of rostrum (including fan, excluding chelicerae and palps) and posterior edge of opisthosoma (fig. 2).
- O** - eye or its lens diameter (fig. 1).
- OAS** - distance between eye centre and midpoint between anterior sensillae bases measured in the median plane (fig. 1).
- OCM** - perpendicular distance between crista metopica axis and eye centre (fig. 1)
- O-O** - distance between centres of eyes (fig. 2).
- OPS** - distance between eye centre and midpoint between posterior sensillae bases measured in the median plane (fig. 1).
- O-Ur** - distance between eye and urnula centres (fig. 2).
- pP** - posterior process of crista metopica or its length (fig. 1).
- PSA** - posterior sensillary area of crista metopica (fig. 1).
- PSAL** - length of posterior sensillary area of crista metopica excluding posterior process (fig. 1).
- PSAn** - perpendicular distance between line of centres of posterior sensillae bases and anterior edge of external anal sclerite (fig. 2).
- PSAW** - width of posterior sensillary area of crista metopica (fig. 1).
- PSBM** - perpendicular distance between line of centres of posterior sensillae bases and posterior edge of posterior process (fig. 1).

- PSBp** - perpendicular distance between line of centres of posterior sensillae bases and posterior edge of crista metopica excluding posterior process (fig. 1).
- PSens** - posterior sensillae or their length (fig. 1)(Sens = SE in SOUTHCOTT, 1986 and later papers).
- PSG*** - perpendicular distance between line of centres of posterior sensillae bases and anterior edge of external genital sclerite (fig. 2).
- RCM** - rod of crista metopica; linear part of crista metopica which connects anterior and posterior sensillary areas (fig. 1).
- SBa** - distance between centres of anterior sensillae bases (fig. 1).
- SBp** - distance between centres of posterior sensillae bases (fig. 1).
- SL** - maximal length of scutum (shield)(fig. 1)(SOUTHCOTT, 1961a as "L").
- SW** - maximal width of scutum (shield)(fig. 1)(SOUTHCOTT, 1961a as "W").
- Ur** - urnula or its maximal internal diameter (fig. 3).
- Ur-Ur** - distance between urnulae centres (fig. 2).
- WB** - maximal width of body (fig. 2).

REFERENCES

- FAIN, A., GUMMER, S. L., WHITAKER, J. O. Jr., 1987. Two new species of *Leptus* LATREILLE, 1796 (*Acarina*, *Erythraeidae*) from the U.S.A. *Internat. J. Acarol.*, **13**(2): 135-140.
- SOUTHCOTT, R. V., 1960. Notes on the genus *Sphaerotarsus* (*Acarina*: *Smarididae*). *Trans. Roy. Soc. S. Aust.*, **83**: 149-161.
- , 1961a. Studies on the systematics and biology of the *Erythraeoidea* (*Acarina*), with a critical revision of the genera and subfamilies. *Aust. J. Zool.*, **9**(3): 367-610.
- , 1961b. Notes on the genus *Caeculisoma* (*Acarina*: *Erythraeidae*) with comments on the biology of the *Erythraeoidea*. *Trans. Roy. Soc. S. Aust.*, **84**: 163-178.
- , 1961c. Description of two new Australian *Smarididae* (*Acarina*), with remarks on chaetotaxy and geographical distribution. *Trans. Roy. Soc. S. Aust.*, **85**: 133-153.
- , 1963. The *Smarididae* (*Acarina*) of North and Central America and some other countries. *Trans. Roy. Soc. S. Aust.*, **86**: 159-245.
- , 1986. Australian larvae of the genus *Trombella* (*Acarina*: *Trombidoidea*). *Aust. J. Zool.*, **34**: 611-646.