

**A new record
for the length of the spermatozoa in thrips
(Thysanoptera, Phlaeothripidae)**

Note 12 (Thysanoptera), released by Luigi De Marzo on December 2012 – Spermatozoa of *Bacillothrips longiceps* overcome the range of the lengths known for thrips so far. l.demarzo@alice.it www.luigidemarzo.eu

SUBJECTS

- Wide interspecific variability is reported for thrips, referring to the length of the spermatozoa (De Marzo, 2003; 2006),
- as two ranges, 100-200 and 70-1.200 μm , were reported so far, respectively for Terebrantia and Tubulifera.
- A new extreme value is recorded here for the tubuliferan thrips, *Bacillothrips longiceps* (O.M. Reuter).

MATERIAL AND METHODS

- Adults of *Bacillothrips longiceps* were collected on plants of Bermuda-grass (*Cynodon dactylon* L.) and other Gramineae in different localities of Southern Italy.
- Females were dissected in salt solution (NaCl 0,9%) to separate their spermatheca.
- This was squeezed on slides in the same solution to separate the mass of spermatozoa.
- Length of the latter was evaluated on drawings made at the light-chamber.

RESULTS

- Spermatheca of *Bacillothrips longiceps* (Fig. 1) embodies that occurring in further two large-sized Phlaeothripidae, *Compsothrips albosignatus* (O.M. Reuter) and *Megathrips inermis* Priesner,
- as its receptacle is able to inflate to some extent.
- Its thin duct is moderately long and lacks any evident muscular device.
- Dense tangles of thread-like spermatozoa were extracted from the receptacles.
- Length of each spermatozoon was evaluated to be close to 1.500 microns.

CONCLUDING REMARKS

- Spermatozoa of thread-like type were found in *Bacillothrips longiceps* as previously in both *Compsothrips albosignatus* and *Megathrips inermis*,
- whereas rod-like units were reported for other Tubulifera.
- Spermatheca of *Bacillothrips longiceps* is adapted to store a very large quantity of sperm;
- anyhow, it doesn't include any device for discharging the latter.
- The following Table A lists the values of sperm-length recorded for Tubulifera so far.

Tab. A – Sperm lengths recorded for some Tubulifera-Phlaeothripidae, including the new record

species	length (microns)
<i>Allothrips pillichellus</i> (Priesner)	300
<i>Bacillothrips longiceps</i> (O.M. Reuter)	1.500
<i>Bolothrips insularis</i> (Bagnall)	300
<i>Compsothrips albosignatus</i> (O.M. Reuter)	700
<i>Haplothrips andresi</i> Priesner	70
<i>Haplothrips mateolanus</i> De Marzo & Ravazzi	70
<i>Haplothrips simplex</i> (Buffa)	70
<i>Megathrips inermis</i> Priesner	1.200

REFERENCES

- De Marzo L., 2003 - Dettagli anatomici dei genitali interni in *Melanthrips fuscus* (Sulzer) e altri tisanotteri. *Entomologica*, Bari, 36 (2002): 109-119.
- De Marzo L., 2006 - Lunghezza degli spermatozoi in *Megathrips inermis* Priesner (Thysanoptera Phlaeothripidae). *Boll. Zool. agr. Bachic.*, Milano, ser. II, 37 (2): 179-183.

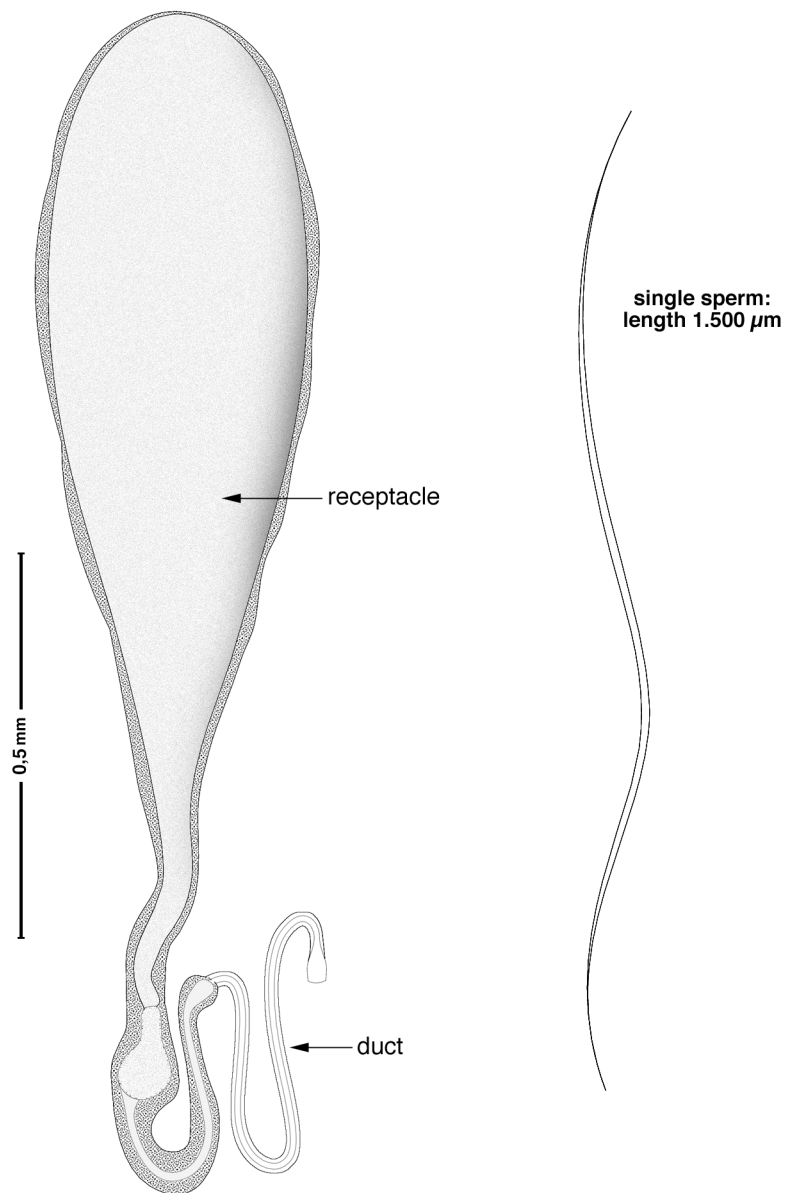


Fig. 1 - *Bacillothrips longiceps* (O.M. Reuter): spermatheca and spermatozoon at the same magnification.