

Spiders from the Dunes at Tranum, N.W.-Jutland.

By

Ole Bøggild.

Zoological Laboratory, Royal Veterinary and Agricultural College,
Copenhagen V.

Through the courtesy of Miss Karen Vestergaard, cand. mag., I had the opportunity to spend a couple of days during the summer 1956 in the dunes at Tranum (in Danish: Tranum Klit). I am indebted to Miss Vestergaard for the proposal that I should make collections in this fascinating area and for her kindness to lend me her cottage there.

Tranum Klit is situated on the west coast of Jutland (57° 11' 20" North. Lat.). Collections were made in the dunes, in a meadow between the dunes, and along a temporary brook running through the meadow. The brook flows rapidly after rainfalls but breaks up into pools in dry periods. On the beach there was no seaweed and only one specimen, an *Erigone*, was found there. As the whole area was practically without shelter the collecting net was of no use and all the specimens were picked by hand. The firmly interwoven raw humus layer on the bottom of the hollows between the dunes apparently harboured the numerically richest fauna.

The collection consists of 270 determinable specimens of 48 species. Four species were conspicuously numerous: *Lycosa pul-lata*, *Theridion bimaculatum*, *Araneus adiantus*, and *Maso sundevalli*. The abundance of *Maso* is of interest because this species has not been recorded from Denmark since 1920 when it was recorded from 'Denmark, without further information about locality' (Deichmann 1920). But there is reason to believe that the species is widespread and rather common in Denmark, at least I possess specimens from several localities.

Six species are new to the Danish fauna in so far as there are no previous records, but some of them have been found in other parts of the country. The recording of these localities will be postponed to later papers.

The almost ubiquitous and usually abundant *Meta segmentata* (Cl.) appears to be absent in the area; at least none was found in spite of a rather intense search for it. It was found

6 km from Tranum Klit in Tranum Plantation and may presumably be found even nearer. The absence of another species, *Lycosa prativaga* L. Koch, is also of interest as it appears to be very scarce in northern Jutland even in habitats where its occurrence could be greatly expected. Nørgaard (1945) found remarkably few *L. prativaga* during his investigation on the ecology of lycosid spiders, and on the Sphagnum carpet of a bog in Mols he found *L. pullata* but apparently not *L. prativaga* (Nørgaard 1951). On the Sphagnum carpet of Bøllemosen, a bog north of Copenhagen, I have found many *L. prativaga* whereas *L. pullata* was confined to the forest bordering the bog. As it is still a problem whether these two species are distinct or only variations of one species (Locket & Millidge 1951) these geographical variations in ecology are of considerable interest even to the taxonomist.

The species collected in the area are listed below.

Gnaphosidae.

Haplodrassus signifer (C. L. K.), 1 ♂, 2. vii.

Micaria pulicaria (Sund.), 1 ♀ subad., 1. vii.

Clubionidae.

Clubiona stagnatilis Kulcz., 1 ♂, 30. vi. Recorded from Denmark only once (Cloudsley-Thompson 1955).

Clubiona similis L. Koch, 1 ♂, 30. vi.

Clubiona diversa O. P.-C., 1 ♀, 28. vi. Recorded from Denmark only once and without further information about locality (Sørensen 1904).

Cheiracanthium erraticum (Walck.), 1 ♂, 28. vi.

Cheiracanthium virescens Sund., 1 ♀, 30. vi.

Zoridae.

Zora spinimana (Sund.), 1 ♀, 1 ♂ subad., 28. vi; 1 ♀ subad., 1 juv., 30. vi.

Philodromidae.

Philodromus aureolus (Cl.), 1 ♀, 1. vii.

Tibellus maritimus (Menge), 1 ♀, 3 juv., 29. vi; 1 ♂, 30. vi. First Danish record.

Salticidae.

Aelurillus v-insignitus (Cl.), 1 juv. Thanks are due to Dr. Brændegård who very kindly verified the determination of this specimen.

Synageles venator (Lucas), 1 ♂ subad., 30. vi.

Lycosidae.

Lycosa monticola (Cl.), 5 ♀♀, 3 ♂♂, 2.—6. vii.

Lycosa tarsalis Th., 8 ♀♀, 1 ♂, 30. vi—6. vii.

Lycosa pullata (Cl.), 51 ♀♀, 13 ♂♂, 1.—6. vii.

Lycosa amentata (Cl.), 1 ♂, from a field behind the dunes, 27. vi.

Lycosa nigriceps Th., 3 ♀♀, 1.—3. vii.

Tarentula pulverulenta (Cl.), 2 ♀♀, 1 ♂, 2.—6. vii.

Tarentula fabrilis (Cl.), 1 ♂ subad., 29. vi.

Trochosa terricola Th., 2 ♂♂, 28.—30. vi.

Arctosa perita (Latr.), 3 ♀♀, 2 juv., 30. vi—3. vii.

Pirata piraticus (Cl.), 6 ♀♀, 3 ♂♂, 1 juv., from the brook, 29. vi.

Theridiidae.

Euryopis flavomaculata (C. L. K.), 1 ♀, from the raw humus layer on the bottom of a hollow between the dunes, 30. vi. Recorded from Denmark only twice (Deichmann 1920, Brændegaard 1928).

Steatoda bipunctata (L.), 7 ♀♀, 17 juv., from the cottage, 26. vi.—2. vii.

Theridion bimaculatum (L.), 16 ♀♀, 19 ♂♂, 28. vi—3. vii.

Tetragnathidae.

Tetragnatha extensa (L.), 4 ♂♂, 28.—29. vi.

Pachygnatha degeeri Sund., 2 ♀♀, 1 ♂, 30. vi—6. vii.

Araneidae.

Araneus adiantus (Walck.), 16 juv., 28. vi—3. vii.

Erigonidae.

Walckenaera acuminata Bl., 2 ♀♀, 30. vi. Only one Danish locality known previously (Brændegaard 1928).

Wideria antica (Wider), 2 ♀♀, 29. vi. Recorded from Denmark only once but without further information about locality (Deichmann 1920).

Wideria melanocephala (O. P.-C.), 2 ♀♀, 30. vi. First Danish record.

Dicymbium nigrum (Bl.), 1 ♀, 3. vii.

Dismodicus elevatus (C. L. K.), 1 ♀, 28. vi; 1 ♂, 3. vii. This is the third Danish record, the two previous ones have been given by Deichmann (1920) and Cloudsley-Thompson (1955). Further Danish records will be published later.

Enidia (= *Hypomma*) *bituberculata* (Wider), 1 ♀, 30. vi.

Maso sundevalli (Westr.), 9 ♀♀, 19 ♂♂, 3 juv., 28. vi—1. vii. Recorded from Denmark by Deichmann (1920) but without further information about locality. Further Danish records will be published later.

Pocadicnemis pumila (Bl.), 2 ♀♀, 28. vi—1. vii. First Danish record.

Oedothorax retusus (Westr.), 1 ♀, 29. vi.

Trichopterna thorelli (Westr.), 2 ♀♀, 29.—30. vi. The statement of the occurrence of this species in Denmark by Bonnet (1956, p. 1674) with reference to Deichmann (1920) is, as Dr. Brændegård kindly has pointed out to me, due to a mistake. Deichmann expressly states, in Danish, that it is 'not yet known from Denmark'. Wiehle (1960) also says that the species occurs in Denmark but he has most kindly told me that his statement is based on Bonnet (1956). Tranum Klit is thus the only known Danish locality of *Trichopterna thorelli*, and this is the first true Danish record.

Gongylidiellum vivum (O. P.-C.), 1 ♂, 3. vii. First Danish record.

Erigone atra (Bl.), 1 ♀, at the brook, 29. vi; 1 ♀, from the beach, 2. vii.

Linyphiidae.

Porrhomma pygmaeum (Bl.), 1 ♀, 3. vii. Recorded from Denmark only twice (Nielsen 1932).

- Agyneta subtilis* (O. P.-C.), 1 ♀, 30. vi. First Danish record.
Agyneta conigera (O. P.-C.), 2 ♀♀, 28.—30. vi. Trichobothria not bent. First Danish record.
Bathyphantes gracilis (Bl.), 1 ♂, 3. vii.
Bathyphantes parvulus (Westw.), 1 ♂, 30. vi.; 1 ♀, 2. vii.
Lepthyphantes obscurus (Bl.), 1 ♀, in the cottage, 27. vi.
Lepthyphantes mengei Kulcz., 2 ♀♀, 28. vi. Recorded from Denmark only once (Nielsen 1932).
Linyphia clathrata Sund., 2 ♀♀, 1 ♂, 28. vi—3. vii.

References.

- Bonnet, P. 1956: Bibliographia araneorum, vol. II, pt. 2. Toulouse.
 Brændegaard, J. 1928: Fortegnelse over Danmarks Edderkopper. — In E. Nielsen: De danske Edderkoppers Biologi, p. 679—706. København: Levin & Munksgaard. (Also in vol. II of Nielsen 1932).
 Cloudsley-Thompson, J. L. 1955: Notes on Arachnida, 23. — Observations on the ecology of arachnids in Denmark. — Ent. mon. Mag. 91 p. 31—32.
 Deichmann, E. 1920: Oversigt over de danske Theridier samt over Slægten Dictyna (Aran.). — Ent. Medd. 13 p. 231—288.
 Locket, G. H. & A. F. Millidge 1951: British spiders, vol. I. London: Ray Society.
 Nielsen, E. 1932: The biology of spiders, vol. I. Copenhagen: Levin & Munksgaard.
 Nørgaard, E. 1945: Økologiske Undersøgelser over nogle danske Jagtedderkopper. — Flora og Fauna 51 p. 1—37.
 Nørgaard, E. 1951: On the ecology of two lycosid spiders (*Pirata piraticus* and *Lycosa pullata*) from a Danish Spagnum bog. — Oikos 3 p. 1—21.
 Sørensen, W. 1904: Danmarks, Færøernes og Islands Edderkopper med Undtagelse af Theridierne. — Ent. Medd. II Række, 1 p. 240—426.
 Wiehle, H. 1960: Spinnentiere oder Arachnoidea (Araneae) XI: Micryphantidae — Zwergspinnen. — Tierw. Deutschl. 47.
-