

THE TAXONOMIC STATUS OF *SCOLOPOSTETHUS*
PSEUDOGRANDIS WAGNER
 (HETEROPTERA: LYGAEIDAE)

B. Aukema, 2000. The taxonomic status of *Scolopostethus pseudograndis* Wagner (Heteroptera: Lygaeidae) – Tijdschrift voor Entomologie 143: 295-296. [ISSN 0040-7496]. Published 1 December 2000.

Scolopostethus pseudograndis Wagner is synonymized with *S. grandis* Horváth.

B. Aukema, Section Entomology, Plant Protection Service, P.O. Box 9102, 6700 HC Wageningen, The Netherlands. E-mail: B.Aukema@pd.agro.nl

Key-words. – Heteroptera; Lygaeidae; new synonymy.

The lygaeid *Scolopostethus grandis* was described by Horváth (1880) from Romania (Mehadia). The single female from this locality kept in the Hungarian Natural History Museum in Budapest was designated as lectotype by Scudder (1970). Horváth (1891) also examined British *Scolopostethus* material and synonymized *S. punctatus* Edwards, 1889 with *S. grandis*. According to Slater (1964) *S. grandis* has been recorded from Austria, England, France, Germany (before 1950), Greece (Corfu), Hungary, The Netherlands (in error by misinterpretation of Reclaire 1932), Russia, Wales and former Yugoslavia (Croatia and Macedonia according to Josifov 1986).

Scolopostethus pseudograndis was described by Wagner (1950) after material from Germany (the north-western part of the country and Bayern) on the basis of a number of minor morphological differences and more or less justified by his opinion that *S. grandis* did not occur in Germany. Slater (1964) listed *S. pseudograndis* from the Czech Republic, France and Germany. Furthermore, Ossiannilsson (1971) recorded the species from Sweden, Aukema (1989) from The Netherlands, Gogala & Gogala (1989) from Slovenia, Delescaille et al. (1991) from Belgium, and Reichling & Gerend (1994) from Luxembourg.

The differences between *Scolopostethus pseudograndis* and *S. grandis* listed by Wagner (1950) are as follows. In the latter the antennal bases are less protruding and the antennae longer, but usually paler, the second segment as long as the width of the head with eyes. Pronotum longer and anteriorly broader (posteriorly as wide as, or slightly wider than anteriorly). Front femora much thicker and usually pale, with stouter teeth, the large one shorter but more robust. Front tibiae with a larger number of small teeth and one larger teeth present in fe-

males as well. Brachypters with shorter forewing membrane, covering 7th tergite for a small part only (in *S. pseudograndis* covering the largest part). Pygophore larger and broader, parameres with a broader apical part, more developed lateral parts, and a more dense pubescence. Stichel (1958) only used the differences in the teeth on the front femora to separate both species.

Both species are wing-dimorphic with either fully developed or slightly reduced forewings in both sexes. With *Scolopostethus affinis* they have the mesosternal tubercles in common, but they are larger and lack the distinctly bicoloured antennae. Besides, in the brachypterous morph the membrane is stronger developed than in brachypterous *S. affinis* (see also Wagner 1966).

Because Dutch material could not be identified with certainty using these characters and runs to *Scolopostethus grandis* rather than to *S. pseudograndis*, more material was examined, including the holotype and two paratypes of *S. pseudograndis* and the lectotype of *S. grandis*. No differences were found in the characters listed, neither in the male genitalia (parameres), nor in other morphological characters, to support Wagner's concept of two valid species. Thus, it is concluded that *Scolopostethus pseudograndis* Wagner is a junior synonym of *S. grandis* Horváth.

The material examined is listed below. The following abbreviations are used for depositories. BA: collection B. Aukema, Renkum; BMNH: British Museum (Natural History), London; HNHM: Hungarian Natural History Museum, Budapest; OXUM: Oxford University Museum, Oxford; RI: collection Chr. Rieger, Nürtingen, Germany; RMNH: Nationaal Natuurhistorisch Museum, Leiden; ZMAN: Zoologisch Museum, Amsterdam; ZMAS: Zoological Institute, St. Petersburg; ZMHB: Zoologisches Museum, Humboldt Uni-

versität, Berlin; ZMUH: Zoologisches Institut und Zoologisches Museum der Universität Hamburg.

Material examined. — CROATIA: Buccari, 2.iv.1890, L. Biró, 1 ♀ (HNHM); Martinšćica? [handwritten], 30.iii.1885, 1 ♀ (HNHM); Split, 19.ix.1949, Novak, 1 ♂ (ZMUH, as *S. grandis*, det. E. Wagner). — ENGLAND: Bedfordshire: Sharpenhoe, 17.iv.1936, ex coll. P. Harwood, 2 ♂, 1 ♀ (OXUM); Berkshire: Windsor, 25.ix.1960, A. M. Masee, 1 ♂, 1 ♀; Ibid., G. E. Woodroffe, 9 ♂, 8 ♀, 1 ♂, 1 ♀; Windsor Forest, iv.1962, G. E. Woodroffe, 1 ♀ macr. (BMNH). Buckinghamshire: Hedgerley, 24.viii.1952, G.E. Woodroffe, 1 ♀; Ibid., 25.iv.1954, 2 ♀ (BMNH). Cornwall: Newquay, 12.iv. 1896, 1 ♀ (OXUM). Dorset: Holworth, 5.v.1935, P. Harwood, 4 ♂, 2 ♀; Lyme Regis, 13-22.iv.1951, A. M. Masee, 1 ♂, 1 ♀ (BMNH). Essex: Epping Forest, iv. 1896, E. A. Butler, 1 ♂, 1 ♀; Ibid., ix.1898, 2 ♂ (BMNH). Gloucester: Bristol, 27.v.1958, M. Ackland, 1 ♀ (OXUM). Hampshire: Lympington, 30.xii. 1934, P. Harwood, 1 ♂; Ibid., Pitts Deep, 3.iv.1935, P. Harwood, 1 ♂, ♀; Ibid. 20.iv. 1935, A.M. Masee, 1 ♀; New Forest, G. C. Champion, 1 ♀; Ibid., 28.vi.1936, A. M. Masee, 1 ♀ (BMNH). Herefordshire: Cusop, viii. 1913, E. A. Butler, 1 ♀ (BMNH). Kent: Ham Street, 22.x.1958, A. M. Masee, 2 ♀; Ibid. 6.x.1965, 1 ♀; Ibid., 31.v.1961, G. E. Woodroffe, 1 ♀; Ryarsh, 16.v.1936, G. H. L. Dicker, 3 ♂, 2 ♀; Wrotham Heath, 15.viii.1943, A. M. Masee, 1 ♀ (BMNH). Suffolk: Oulton Broad, 24.vii.1897, ex coll. A. M. Masee, 1 ♀ (BMNH). Suffolk: Ipswich, Rushmere, viii.1911, 1 ♀; Surrey: Boxhill, 10.v.1953, A. M. Masee, 1 ♂ (BMNH); Chobham, vi.1901, 1 ♀ (OXUM); Esher Com., 7.ix.1953, A. M. Masee, 1 ♀; Leith Hill, viii.1895, E. A. Butler, 1 ♂, 1 ♀; Shere, v. 1904, E. A. Butler, 3 ♀; Woking, v.1888, 1 ♀ (BMNH); Woking, v.1888, 5 ♀; Ibid., vii.1888, 1 ♂ (OXUM). ? Worth, vi.1885, ex coll. Saunders, 1 ♀ (OXUM). — FRANCE: Gard: W of Pont du Gard, SW of Collias and Sanilhav, 25/26.iv.1988, D. Grimm, 1 ♂ (RI). Corsica: Bocognano, iv.1905, K. Dorn, 1 ♂ (ZMHB). — GERMANY: Baden-Württemberg: Schwäbische Alp, Neuffen, 21.ii.1980, Chr. Rieger, 1 ♂ (RI). Bayern: Weissenburg, 15.v.1937, K. Schmidt, 1 ♂ (ZMHB); Treuchtlingen, 20.ix.1953, G. Seidenstücker, 1 ♀ (ZMAS); Fränkische Jura, Weltheim, 8.iv.1953, G. Seidenstücker, 1 ♀ (ZMAS); Mecklenburg-Vorpommern, Ribnitz i. M., 2.iv.1939, A. Wendt, 1 ♂ submacr.; Warnemünde, 7.ix.1939, A. Wendt, 1 ♀ (ZMHB); Ost-Holstein, Plön, 18.iv.1944, R. Remane, 2 ♂ macr., 1 ♀ submacr. (ZMUH, holotype (♂) and paratypes (♂, ♀) of *S. pseudograndis*); Ibid., 1 ♂ submacr. (BMNH, paratype); Spessart, 11.iv. 1936, Singer, 1 ♀; Ibid., Rothenbach, 11.iv. 1936, Singer, 1 ♂ (ZMHB); Ibid, 22.iii.1936, Singer, 1 ♂ (HNHM); Ibide., 11.iv.1937, K. Singer, 1 ♂, 1 ♀ (ZMAN). Rheinland-Pfalz: Treis-Karden, 29/30.v.1982, Chr. Rieger, 1 ♂ (RI). Taunus, Kiedrich, 25.iii.1956, Zebe, 1 ♂ (ZMHB); Taunus, Lorch, 9.iv. 1955, Zebe, 1 ♂ (ZMHB). — HUNGARY: Ung, 1 ♂ (HNHM); Bács Kiskun: Bugac, 10-19.vii.1986, M. Uhlig, 1 ♀ (ZMHB); Zircz, 7.vi.1986, 1 ♀ (HNHM). — LUXEMBOURG: Mamer, 5.x.1985, R. Reichling, 1 ♂, 2 ♀ (BA); Senningerberg, 18.v.1984, R. Reichling, 1 ♀ (BA). — THE NETHERLANDS: Limburg: Camerig, 21.ii.1994, K. Alders, 1 ♂ (ZMAN); Gronsveld, Riesenber, 20.x.1950, H. C. Blöte et al., 1 ♀ (RMNH); Maastricht, St. Pietersberg, 16.viii.1950 (1 ♂) and 17.x.1950 (2 ♂, 1 ♀), H. C. Blöte et al. (RMNH); Susteren, 28-3-1997, Th. Heijerman, 2 ♂, 1 ♀ (ZMAN). Gelderland: Renkum, Oranje Nassau's Oord, 26.v.1997, B. Aukema, 5 ♂, 7 ♀ (BA); Rhenen, Grebbeberg, 22.vii.1989, Th. Heijerman, 2 ♀; Ibid., 30.v-30.iv.1990, Th. Heijerman, 4 ♀

(ZMAN); Ibid, 25.x.1990, B. Aukema, 2 ♂ (BA); Wageningen, Wageningse Berg, 31.vii.1985, Th. Heijerman, 1 ♀ (ZMAN); Wageningen, Oranje Nassau's Oord, 13.iv.1997, B. Aukema, 2 ♂ (BA); Winterswijk, 15.ii.1997, Th. Heijerman, 1 ♂, 1 ♀ (ZMAN). — ROMANIA - Herkulesbad [= Baile Herculane], 1 ♂ (HNHM); Ibid, 1895, Ganglb., 1 ♀ (ZMUH, as *S. grandis*, det. E. Wagner); Ibid, Pralosschlucht, 21.vi.1932, 1 ♀ (ZMHB); Mehadia, vii.1878, 1 ♀ (HNHM, lectotype of *S. grandis*). — SLOVAKIA: Trencsén [= Trenčín], 2 ♂ (HNHM).

ACKNOWLEDGEMENTS

Thanks are due to J. Deckert, Berlin, H. Strümpel, Hamburg, J. van Tol, Leiden, L. Reichling, Luxembourg, Chr. Rieger, Nürtingen, T. Vásárhelyi, Budapest and M. Webb, London for permission to study collection material and/or the loan of specimens.

REFERENCES

- Aukema, B., 1989. Annotated checklist of Hemiptera-Heteroptera from The Netherlands. — Tijdschrift voor Entomologie 132: 1-104.
- Delescaille, L.-M., K. Hofmans & L. Woué, Les réserves naturelles du Viroin. Trente années d'action d'Ardenne et Gaume dans la vallée du Viroin. — Parcs Nationaux 46: 4-68.
- Edwards, J., 1889. The British species of *Scolopostethus*. — Entomologist's Monthly Magazin 25: 278.
- Gogala, A. & M. Gogala, 1989. True bugs of Slovenia (Insecta: Heteroptera). — Biološki Vestnik 37: 11-44.
- Horváth, G., 1880. Hemipterologische közlemények. — Természetrizajzi Füzetek 4: 184-192.
- Horváth, G., 1891. Synopsis of the genus *Scolopostethus*. — Entomologist's Monthly Magazin 27: 116-119.
- Josifov, M., 1986. Verzeichnis der von der Balkanhalbinsel bekannten Heteropterenarten (Insecta, Heteroptera). — Faunistische Abhandlungen herausgegeben vom Staatlichen Museum für Tierkunde in Dresden 14: 61-93.
- Ossiannilsson, F., 1971. Till kändnaden om Kullbergs Halvvingar (Hemiptera). — Kullbergs Natur 14: 1-55.
- Scudder, G.G.E., 1970. The World Rhyparochrominae (Hemiptera, Lygaeidae). XI. The Horváth types. — Annales Historico-Naturales Musei Nationalis Hungarici 62: 197-206.
- Reclaire, A., 1932. Naamljst der in Nederland en omliggend gebied waargenomen wantens (Hemiptera-Heteroptera). — Tijdschrift voor Entomologie 75: 59-298.
- Reichling, L. & R. Gerend, 1994. Liste des Hétéroptères du Grand-Duché de Luxembourg. — Bulletin de la Société des Naturalistes Luxembourgeois 95: 273-286.
- Slater, J.A., 1964. A catalogue of the Lygaeidae of the World. II: 779-1668. — University of Connecticut, Storrs.
- Stichel, W., 1957-1962. Illustrierte Bestimmungstabellen der Wanzen. II. Europa. (Hemiptera - Heteroptera Europae) 4: 1-838. — Stichel, Berlin-Hermsdorf.
- Wagner, E., 1950. *Scolopostethus pseudograndis* n. sp. (Hem. Het. Lygaeidae). — Verhandlungen des Vereins für Naturwissenschaftliche Heimatforschung 30 (1949): 50-52.
- Wagner, E., 1966. Wanzen oder Heteropteren. I. Pentatomorpha. — Die Tierwelt Deutschlands 54: i-vi, 1-235.

Received and accepted: 30 October 2000