## NOTES ON THE SYNONYMY OF THE GENERA INCLUDED IN THE TRIBE LACHNINI.

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In taking up the preliminary work on what I term the subfamily Lachninae it is very hard to ascertain the correct standing of several of the genera in the tribe Lachnini both from a standpoint of literature and classification.

Beginning with the original description of the genus Lachnus the author will discuss the later genera as erected and invites further discussion in order that the correct generic names may be used in the future.

The genus Lachnus Burmeister. Illiger is credited with the genus, but in reality it belongs to Burmeister and was published in 1835 in his Handbuch der Entomologie, p. 91.

"3 (13) Gatt Lachnus Ill.

Aphis autor.

Eh. Fuhler deutlich sechsgliederig, kurzer als der Leib. Das erste und zweite Glied kurz und dick, das dritte sehr lang, das vierte 2-3 kurzer, das funfte etwas langer als das dritte, das sechste klein, zugespitzt bei einigen Arten wie am Ende zusammen geschnurt und scheinbar ein eigenes Glied bildend. Flugel mit starker Randrippe. Hinterleib ohne Honigrohren hochstens mit zwei Hockern an deren Stelle."

Under this genus Burmeister gives seven species as follows:

1. Lachnus lapidarius, (Fab.), which appears to be an unrecognizable species.

Lachnus fagi, (Linn.), which is now the type of the 2. genus Phyllaphis Koch.<sup>1</sup>

3. Lachnus quercus, (Linn.), which is now the type of the genus Stomaphis Walker.<sup>2</sup>

4. Lachnus fasciatus, Burmeister, which Del Guercio has recently placed in his Genus Lachniella.<sup>3</sup>

5. Lachnus Punctatus, Burmeister, which up to the present time has not been definitely recognized (may be viminalis Boyer).<sup>4</sup> (?)

Koch, Die Pflanzenlause Aphiden, 1857. p. 248.
Walker, The Zoologist, 1870, Vol. 28, p. 2000.
"Redia," 1909, Vol. 5, fasc. 2, pp. 173-359.
Boyer, Ann's Ent. Soc. France, 1841, p. 184.

Then he mentions *A phis pini* aut. and *A phis betulae* autor to go in this genus but as no reference is made to any one author neither species can have a valid standing in this genus.

As one of the species originally cited under the genus must hold for the type of that genus then must one of the four valid species be that type.

Two of the four are unquestionably removed as types of the genera *Phyllaphis* and *Stomaphis*, thus leaving only two for the genus Lachnus.

Lachnus punctatus if found to be distinct is the only species which has not been definitely recognized and placed in a different genus by the later writers, and it is the only species left for the type of the genus.<sup>5</sup> Unless this species is located the genus Lachnus must revert to the group containing L. fasciatus Burm. as a type.

A careful study of *Lachnus viminalis* Boyer, Boyer's description of that species, and Burmeister's description may (?) show that *L. viminalis* Boyer is identical with *L. punctatus* Burm. In that case *Lachnus* will be definitely established with *L. fasciatus* as the type. If not then what is the genus and what species can we refer to that genus?

On the other hand in 1908 Mordilko<sup>6</sup> used L. viminalis Boyer to form a new genus *Tuberolachnus*. Should this species prove to be *L. punctatus* then *L. fasciatus* Burm. must be the type of the genus *Lachnus* Burm., as it is the only species of those cited by Burmeister left in that genus. Since *L. fasciatus*, according to Del Guercio at aut., is a valid species I hold that this species under the existing conditions must hold as the type.

The next genus taken up in this tribe was *Cinara* Curtis, as follows:

The genus *Cinara* Curtis. type *A. pini* Linn.? He includes *A. roboris* Linn.

6. Annuaire Musie Zoologique de L'Academie Imperials des Sciences, vol. 13, 1908, p. 374.

<sup>5.</sup> April, 1910. Entomological News. The author gave Lachnus punctatus as the type of the genus Lachnus because it seemed to be the only species which was left for that genus, and at that time I was unaware of the fact that Mordwilko (Annuaire Musie Zoologique de L'Academie Imperiale des Sciences, Vol. 13, 1908, p. 374) had used Lachnus viminalis as the type of his genus Tuberolachnus. It is impossible, however, with the present knowledge of the two above species to more than place Lachnus punctatus as a doubtful synonym of L. viminalis for Lachnus punctatus apparently cannot be clearly determined, and Boyer's description of L. viminalis is too clear to be put aside.

This genus was formed in 1835 by Curtis, section 576, Vol. 12, of his British Entomology.

He places two species in the genus, Aphis pini Linn.?, and Aphis roboris Linn. The first he gives as the type, but as he places a question mark after Linn., the species is not valid, and A. roboris Linn. which he describes in full is the type of the genus? The generic names erected for that species since that time are synonyms?<sup>7</sup> He gives the figures of the adults, some of the parts, and also gives a good description.

The synonymy of this genus would then be

Cinara Curtis 1835 Pterochlorus Rondani 1848.<sup>8</sup> Dryobius Koch 1855 Loc. cit.

Dryaphis Amyot<sup>9</sup> which Del Guercio Loc. cit. p. 262 has given genus rank never was a genus name until given that rank by Del Guercio. If we were to accept Amyot's names which were mononomials and in this case means "Oak Aphid" there would never be an end to the changing of names. The late workers on the *Hemiptera* refuse to look upon the work of Amyot except as a curiosity.

The next genus to be formed in the Lachnus group was Stomaphis Walker loc. cit. with *A. quercus* Linn. as the type and there is no discussion necessary on this genus name as it is well established.

Mordilko loc. cit. in 1908 deemed it necessary to erect two new genera in this group, Schizolachnus Mord. with A. tomentosus DeGeer as the type and Tuberolachnus Mord. with Lachnus viminalis Boyer as the type.

In 1909 Del Guercio loc. cit. has placed both of the above species in the genus *Lachnus* regardless of the fact that neither were in the original genus and he removes to other genera all of the original included species. If it is true that *L. viminalis* Boyer and *L. tomentosus* DeGeer are both in the same genus then must *Tuberolachnus* be the genus name with Schizolachnus as a synonym and *L. viminalis* Boyer as the type.

7. The question of the validity of this genus rests upon the fact that Curtis did not give *roborus* as the type and the other species is questioned. The author then concludes that the genus is in question and cannot be placed as a valid genus.

<sup>8.</sup> Esapodi afidicidi in Nuove Ann. di Sci. Nat. Bologna, 1848.

<sup>9.</sup> Ann. Soc. Ent. France vol. 5, ser. 2, p. 481, 1847.

In 1909 five new genera were formed in this group, one of which must be a synonym and a second which would according to the reasoning of this article also be a synonym.

The genera are *Eulachnus* Del Guercio (loc. cit.), the type of which probably should be E. Agilis (Kalt.)

Lachniella Del Guercio (loc. cit.), the type of which is not set, and is, I consider, a synonym of Lachnus?

*Essigella* Del Guercio (loc. cit.) with *E. californicus* (Essig) as the type.

Davisia Del Guercio (loc. cit.) L. longistigma Monell as the type and which is a synonym of the following genus. (Nov. 13, 1909).

Longistigma Wilson <sup>10</sup>, type L. caryae Harris which I have published as synonymous with L. longistigma Monell and L. platinicola Riley. (Nov. 1, 1909.)

According to the evidence shown here using Del Guercio's arrangement to generic characters, the correct synonymy is as follows:

- 1. Trama Heyden type T. troglodytes Heyd.
- Stomaphis Walker type S. Quercus (Linn).
- Pterochlorus Rondani Syn. Cinara Curtis? Syn. Dryobius Koch. Syn. Dryaphis Kirk type P. roboris (Linn.)
- 4. Essigella Del Guercio type E. californicus (Essig.)
- Longistigma Wilson Syn. Davisia Del Guercio
- type L. caryae (Harris). 6. Tuberolachnus Mord.
  - ? Syn. Schizolachnus Mord. type T. viminalis (Boyer).
- Lachnus Burmeister. Syn. Lachniella Del Guercio Type L. fasciatus Burm.
- 8. Eulachnus Del Guercio type E. Agilis (Kalt).

In the December, 1910, issue of the ANNALS the author published a paper on the genera of the subfamily *Aphidinae* and wishes here to note two corrections.

The type of the genus Illinoia should read *m. liriodendri* Monell. The type of the genus *Hyalopterus* Koch should read *A. pruni* Fab. instead of *aurantiae* Koch.

10. Can. Ent., vol. 41, p. 385, 1907.



Wilson, H. F. 1911. "Notes on the Synonymy of the Genera Included in the Tribe Lachnini." *Annals of the Entomological Society of America* 4, 51–54. <u>https://doi.org/10.1093/aesa/4.1.51</u>.

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