

***Aegypocetus guralpi*, A Junior Synonym of *Neophilopterus incompletus* (Insecta: Phthiraptera: Philopteridae)**

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Abstract

Aegypocetus guralpi Dik et al., 2015, a louse described from *Buteo rufinus* collected in southern Turkey, has been found to be conspecific with *Neophilopterus incompletus* (Denny, 1842) from *Ciconia ciconia*. Therefore, *A. guralpi* is now regarded as a junior synonym of *N. incompletus*.

Keywords: Lice, *Neophilopterus incompletus*, *Aegypocetus guralpi*, new synonymy, Hatay, Turkey

***Aegypocetus guralpi*, *Neophilopterus incompletus* (Insecta: Phthiraptera: Philopteridae)'un Yeni Bir Sinonimi**

Özet

Güney Türkiye'de, Kızıl Şahin'den (*Buteo rufinus*) tanımlanmış bir bit olan *Aegypocetus guralpi* Dik et al., 2015'nin Ak Leylek'deki (*Ciconia ciconia*) *Neophilopterus incompletus* (Denny, 1842) ile aynı olduğu anlaşılmıştır. Böylece *A. guralpi* *N. incompletus*'un yeni bir sinonimi olmaktadır.

Anahtar sözcükler: Bit, *Neophilopterus incompletus*, *Aegypocetus guralpi*, yeni sinonim, Hatay, Türkiye

The genus *Aegypocetus* was erected by Clay & Meinertzhagen (1939) ^[1] for some philopterid lice parasitic on birds belonging to the subfamily Aegypinae, the Old World vultures. Dik et al. ^[2] described *Aegypocetus guralpi* from a long-legged buzzard, *Buteo rufinus* (Cretzschmar, 1829) (subfamily Accipitrinae) from southern Turkey. *Neophilopterus incompletus* was described from *Ciconia alba* (now = *Ciconia ciconia* (Linnaeus, 1758)) by Denny in 1842 ^[3]. This species has been reported on white storks (*Ciconia ciconia*) in Turkey by Dik & Uslu ^[4].

Nine lice collected from an unknown host in the Hatay Province, southern Turkey, and mounted on one slide were identified as *Neophilopterus incompletus* (Denny, 1842). Also, the type material of *Aegypocetus guralpi* Dik et al. ^[2], collected from *Buteo rufinus* in the same locality, was re-examined and compared with the *N. incompletus* sample.

A detailed study of several specimens of the chewing louse *Neophilopterus incompletus* collected on wild birds in the Hatay Province, southern Turkey, showed that they are conspecific with *Aegypocetus guralpi* Dik et al. ^[2]. Therefore,

I propose that *A. guralpi* be regarded as a junior synonym of *N. incompletus*.

Two years ago, M.N. Muz - the second author of the paper by Dik et al. ^[2] - sent me a series of chewing lice collected from different wild birds in the Hatay province, southern Turkey. The host names on the labels were given as: 'Eagle A', 'Eagle B', 'Eagle C', 'Long-legged buzzard', 'Stork', etc. written in Turkish. I examined them under a stereo microscope and identified most of them to species, but some samples remained unidentified because the host was unknown or the specimens were not sufficiently clear. On one slide, there were 10 lice labelled as from a 'long-legged buzzard', i.e. *Buteo rufinus*. Using specimens from my collection, I compared the two species recorded from *B. rufinus* listed by Price et al. ^[5] against the new sample from the same host, but the latter did not belong to any of those two species. Then, I used the key to chewing lice genera found on Falconiformes in Price et al. ^[5], and I identified the specimens as belonging to the genus *Aegypocetus*. However, the hosts of all the species placed in the genus *Aegypocetus* are vultures of the subfamily



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Aegypinae, while *B. rufinus* belongs to the Buteoninae. I checked papers dealing with species of *Aegypoeus* (e.g. Clay & Meinertzhagen ^[6]; Dhanda ^[7,8]; Pérez-Jiménez *et al.*^[9]), and my specimens showed some morphological differences from other described species. Subsequent clearing and slide-mounting of the lice allowed a detailed examination of their features, showing that they were a different species, which I believed was new and undescribed. Although I realised that the host association of the sample was unusual, we proceeded to describe it as the new species *Aegypoeus guralpi*.

Now I believe that either the sample was actually collected from a stork but was mistakenly labelled as from a 'long-legged buzzard' (i.e. *Buteo rufinus*), or the lice were mixed in the laboratory during the slide-mounting process. An alternative explanation for this incorrect host-lice association would be that the buzzard may have been feeding on a dead white stork and acquired the lice as stragglers.

In conclusion, I place *Aegypoeus guralpi* Dik *et al.*^[2] as a junior subjective synonym of *Neophilopterus incompletus* (Denny, 1842). Also, I conclude that my incorrect generic identification of the lice due to using a key for louse genera from Falconiformes misguided us to describe a new species, when in fact it belonged to another genus and it was not a new species. This is a good example of the mistakes that can be made by placing too much emphasis on the host identity when identifying lice.

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REFERENCES

1. **Clay T, Meinertzhagen R:** *Aegypoeus*, nom. nov. *The Entomologist*, 72, 36, 1939.
2. **Dik B, Muz MN, Üstüner T:** A new louse species: *Aegypoeus guralpi* sp. n. (Phthiraptera: Ischnocera) from a long-legged buzzard (*Buteo rufinus*). *Kafkas Univ Vet Fak Derg*, 21, 929-932, 2015. DOI: 10.9775/kvfd.2015.13867
3. **Denny H:** Monographia Anoplurorum Britanniae or, an essay on the British species of parasitic insects belonging to the order of Anoplura of Leach, with the modern divisions of the genera according to the views of Leach, Nitzsch, and Burmeister, with highly magnified figures of each species. London: Henry G. Bohn. xxiv + 262 pp., 26 pls, 1842.
4. **Dik B, Uslu U:** Mallophaga (Insecta) species occurring on storks (*Ciconia ciconia* Linnaeus, 1758). *Türkiye Parazitol Derg*, 30, 220-225 (in Turkish), 2006.
5. **Price RD, Hellenthal RA, Palma RL:** World checklist of chewing lice with host associations and keys to families and genera. In, Price RD, Hellenthal RA, Palma RL, Johnson KP, Clayton DH (Eds): *The Chewing Lice: World Checklist and Biological Overview*. pp.1-448. Illinois Natural History Survey Special Publication 24. x + 501 pp, 2003.
6. **Clay T, Meinertzhagen R:** New genera and species of Mallophaga. *The Entomologist*, 71, 275-279, 1938.
7. **Dhanda V:** A new species of *Aegypoeus* Clay & Meinertzhagen, 1939 (Mallophaga). *Ann Mag Nat Hist, Series 13*, 2, 725-730, 1960. DOI: 10.1080/00222935908655759
8. **Dhanda V:** A revision of the mallophagan genus *Aegypoeus* Clay and Meinertzhagen, 1939 (Ischnocera: Philopteridae), with descriptions of three new species. *Ann Mag Nat Hist, Series 13*, 3, 657-683, 1961. DOI: 10.1080/00222936008651072
9. **Pérez-Jiménez JM, Soler-Cruz MD, Ruiz-Martínez I, Díaz-López M, Granados-Torres JE:** A redescription of *Aegypoeus brevicollis* (Burmeister, 1838) (Ischnocera: Philopteridae). *Sys Parasit*, 22, 215-219, 1992. DOI: 10.1007/BF00009668