

Im Sommer 1998 fielen uns auf der italienischen Seite des Luganer Sees zahlreiche Imagines von *Oritherrum cancellatum* auf. In der Folge suchten wir am 21. Juli 1998 die künstliche Uferverbauung zwischen Ponte Tresa (I) und Lavena (I) gezielt nach Exuvien ab. Viele befanden sich beidseits eines kleinen Schiffsaumes an der Ufermauer resp. am Geländer in 60 bis 120 cm Höhe. Rund 500 m vom Flussaustritt entfernt fanden wir neben einigen *O. cancellatum* auch 2 Exuvien von *O. f. unguiculatus*. Diese waren mindestens 50 cm über Wasser vertikal an der aufgerauhten Wand verankert und waren trocken. Am See selbst konnten wir keine Imagines beobachten.

Die Fundumstände zeigen, dass sich die Art im Luganer See erfolgreich entwickeln konnte. In einem Staubbereich der Tresa auf italienischem Gebiet fand Stefan KOHL 1999 ebenfalls Exuvien von *O. f. unguiculatus* (S. KOHL mündl.).

Die Nominatform *O. f. forcipatus* kommt in der Schweiz vereinzelt an Flüssen des Mittellandes, der Voralpen und des Jura vor (MAIBACH & MEIER 1987), ihr Vorkommen an einigen Schweizer Seen ist bekannt: Thuner See, Sarner See, Lungernsee und Neuenburger See (HOESS 1994, HOESS briefl.).

Dank

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## Records on the dragonfly fauna of northwestern Albania (Odonata)

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#### Summary

A total of 24 Odonata species were recorded in June and July 1996. The characters of the ssp. of *Lestes virens* conform with neither with ssp. *virens* nor with ssp. *vestalis*. As expected the specimens of *Lestes viridis* belong to the ssp. *parvidens*.

#### Zusammenfassung

*Libellenfunde im nordwestlichen Albanien (Odonata)* – Im Juni und Juli 1996 wurden im nordwestlichen Albanien 24 Arten nachgewiesen. Die Exemplare von *Lestes virens* entsprechen in ihren Merkmalen weder der Unterart *virens* noch der Unterart *vestalis*. Wie erwartet, gehören die Exemplare von *Lestes viridis* zur ssp. *parvidens*.

#### Introduction

The dragonfly fauna of Albania is very poorly explored. In total not more than 310 records (one species at one locality) of Albanian dragonflies are known. An overview of the Albanian records is given by BLEIK (1966). Additional records, collected during a survey in 1993 are presented in DUMONT et al. (1993). In this article additional records of 24 species collected during 1996 are presented.

#### Methods

The records presented here were collected during two different expeditions in 1996:

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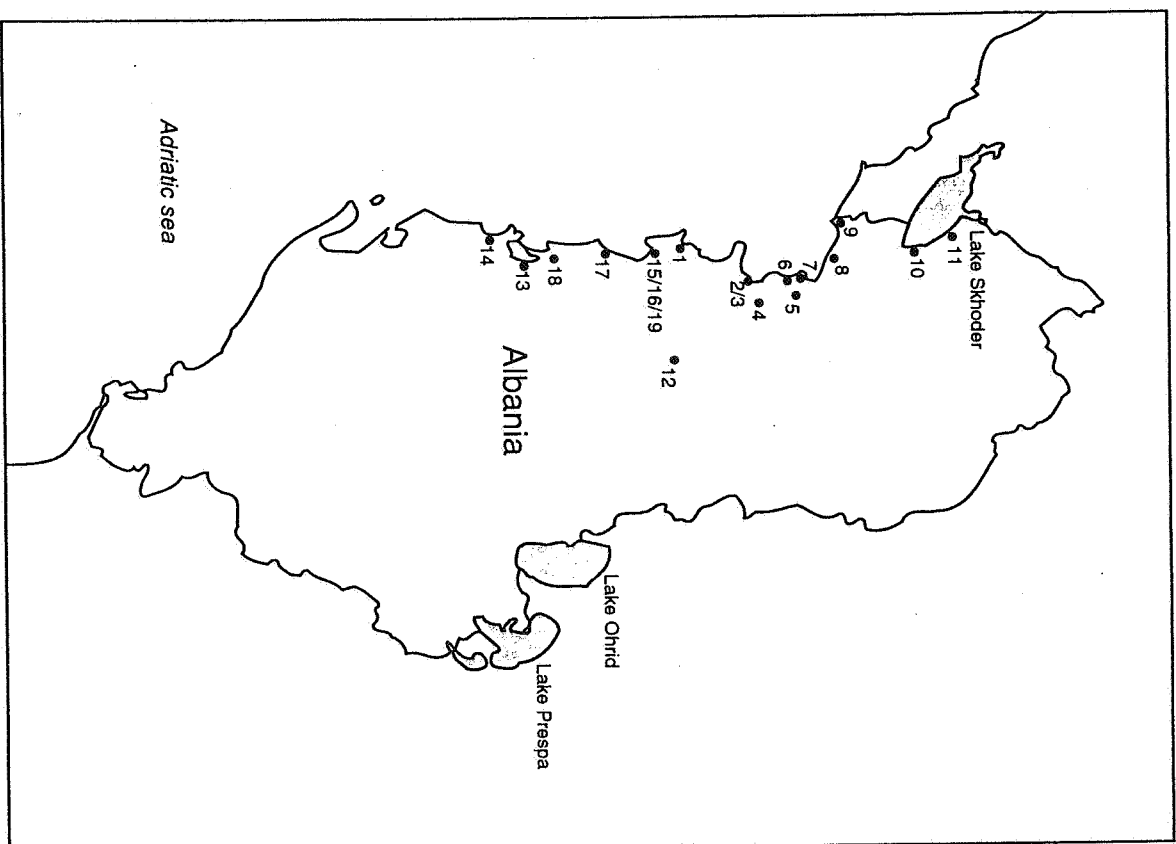


Fig. 1. Topographic situation of the localities. The numbers refer to the list of localities.

9-VI to 27-VI-1996: During this period the author visited the northern part of Albania for a survey of breeding waterbirds. During the survey dragonflies were also recorded. Most identification was done on sight, only difficult species were caught for closer examination. No dragonflies were collected. Most of the visited areas are coastal wetlands.

2-VII to 7-VII-1996: During this period Roy KLEUKERS assisted in a research on grasshopper outbreaks in Albania. Dragonflies of these specimens have been performed by the author and Klaas-Douwe B. DIJKSTRA and have been deposited in the private collection of R. KLEUKERS.

At each locality different kinds of habitat where visited. For this reason no information on habitat is given.

#### List of localities

Localities (Fig. 1) visited by V. J. KALKMAN (coordinates are given with five minutes precision).

- (1) Wetland Lalzi, N Rrima, (41°20'N, 19°25'E): 09/10-VI-1996.
- (2) Patok south (wetland), (41°35'N, 19°35'E): 10-VI-1996.
- (3) Patok north (wetland), (41°35'N, 19°35'E): 13-VI-1996.
- (4) Lac, (41°35'N, 19°40'E): 13-VI-1996.
- (5) Lezhe, (41°45'N, 19°35'E): 14-VI-1996.
- (6) Drin Delta south, (41°40'N, 19°30'E): 15-VI-1996.
- (7) Drin Delta north, (41°45'N, 19°35'E): 15/16-VI-1996.
- (8) Torowice, (41°50'N, 19°30'E): 16-VI-1996.
- (9) Velloja wetland, (41°50'N, 19°20'E): 18/19-VI-1996.
- (10) Lake Shkoder, (42°05'N, 19°25'E): 21/22-VI-1996.
- (11) Lake Shkoder, (42°10'N, 19°20'E): 22-VI-1996.
- (12) Dajti, (41°20'N, 19°55'E): 24-VI-1996.
- (13) Karavastas (wetland), (40°50'N, 19°30'E): 26-VI-1996.
- (14) Delta of the Seman, (40°50'N, 19°25'E): 27-VI-1996.

Localities visited by R. KLEUKERS

- (15) Vrtin, 5 km N Dürres, (41°22'N, 19°27'E): 02-VII-1996.
- (16) Sukht, 8 km NE Dürres, (41°23'N, 19°31'E): 03-VII-1996.
- (17) Qerret, 10 km S Dürres, (41°13'N, 19°31'E): 04-VII-1996.
- (18) Divjakë, 30 km S Dürres, (41°00'N, 19°31'E): 04-VII-1996.
- (19) S Dürres, near the sea, (41°19'N, 19°29'E): 07-VII-1996.

## List of recorded species

The species names are followed by the locality number. The numbers between brackets refer to the number of recorded (locality 1-14) or collected (locality 15-19) individuals.

- *Calopteryx virgo* (Harris): 9
- *Lestes barbarus* (Fabricius): 1 (10), 10, 14, 15 (4 males), 18 (1 male, 1 female), 19 (1 female)
- *Lestes virens* ssp. (Charpentier): 13, 18 (2 females)
- *Lestes viridis parvidens* Artobolevskii: 7 (10)
- *Lestes macrotigma* (Eversmann): 14
- *Platynemis pennipes nitidula* (Brullé): 1 (10), 6 (10), 9 (50), 10, 16 (1 male)
- *Erythronma viridulum* (Charpentier): 3 (100), 7 (30)
- *Ischnura elegans* (Vander Linden): 1 (25), 2 (5), 3 (10), 7 (10), 9 (50), 10, 13, 14, 19 (1 male)
- *Cercion lindemii* (Selys): 11 (1 male)
- *Anax imperator* Leach: 3 (2), 9 (1), 10
- *Anax parthenope* (Selys): 3 (1), 7 (1), 9, 10 (2), 14, 15 (1 male)
- *Aeshna issocles* (Müller): 1 (1), 2 (10), 3 (1), 7 (2), 5 (5), 8, 9 (1)
- *Aeshna affinis* Vander Linden: 1 (10 males), 2 (5 males), 3 (10)
- *Callaechina microstigma* (Schneider): 12 (1 male)
- *Libellula fulva* Müller: 7 (10), 8, 9
- *Orithrum coerulecens* (Fabricius): 3 (10), 4 (10), 17 (1 male, 1 female)
- *Orithrum brunneum* (Fonscolombe): 2 (15 males, 1 female)
- *Orithrum cancellatum* (Linnaeus): 7 (10), 9
- *Orithrum albistylum* (Selys): 1 (4), 2 (2), 3 (1 female), 9 (25), 10, 14, 15 (1 female)
- *Crocothemis erythraea* (Brullé): 1 (5), 3 (10), 7 (20), 9 (10), 10
- *Sympetrum meridionale* (Selys): 3 (5), 9, 13, 15 (1 female)
- *Sympetrum striolatum* (Charpentier): 2 (1)
- *Sympetrum sanguineum* (Müller): 9, 18 (1 male)
- *Gomphus vulgatissimus/schneiderii*: 9 (2)

## Remarks to some species

A total of 24 species was recorded of which none is new for the Albanian fauna. The fact that seven of these were new for the Albanian dragonfly fauna

in 1993 (DUMONT et al. 1993) stresses the fact that the Albanian dragonfly fauna has been very poorly explored.

*Lestes virens* ssp.

The characters of the specimens collected at locality 18 do not conform with the ssp. *virens* or ssp. *vestalis*. They probably form an intermediate between ssp. *vestalis* and a yet undescribed eastern ssp. (JÖDICE pers. comm.).

*Lestes viridis parvidens*

Earlier notes on the occurrence of this (sub)species only mention the name of the species and do not reveal the identity of the (sub)species (BULEK 1966, DUMONT 1993). As suspected (JÖDICE 1997) the (sub)species recorded in Albania is *L. viridis parvidens*.

*Gomphus vulgatissimus/schneiderii*

The gomphids which were seen flying in the vicinity of the Montenegro border are presented as *Gomphus vulgatissimus/schneiderii*. The known distribution of these species (LOPAU & WENDLER 1995) makes it likely that they were *G. vulgatissimus*.

*Orithrum coerulecens*

The shape of the of the lamina anterior of the single male collected near Querret is in between those of ssp. *coerulecens* and ssp. *anceps*. It looks most like the phenotypes 2 and 3 as described in MAUERSBERGER (1994).

## Acknowledgements

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