

AMPHIADRIATIC FAUNAL ELEMENTS IN THE GENERA *Calopteryx* LEACH AND *Cordulegaster* LEACH IN SOUTHERN ITALY (ZYGOPTERA: CALOPTERYGIDAE; ANISOPTERA: CORDULEGASTRIDAE).

In July and August 1990, I visited the mountains of southern peninsular Italy, searching for Balkan species and subspecies of *Calopteryx* and *Cordulegaster* (amphiadriatic faunal elements, cf. G.R. WITTE, 1965, *Bonn. zool. Beitr.* 16 (3/4): 165-248). Although comprehensive publications on the two genera are in preparation, some advance notes are given here.

Calopteryx virgo festiva (Brullé, 1832). — July 22, Catona Rivulet near road No. 183, N of Gambarie, Aspromonte Mts, Calabria, 1 ♂; — July 24, brook in the village of Serra S. Bruno flowing into the Ancinale River, alt. 790 m., Serre Mts, Calabria, several specimens; — July 27, brook in the village of Tirivolo, Sila Piccola Mts, Calabria, 2 ♂, 1 ♀. — July 29, Peschiera and Frido brooks, Bosco Magnano, alt. 750 m, 3 km N of S. Severino Lucano, Pollino Massif, Basili-

cata, many specimens. — Circumadriatic faunal element, mountainous species in southern Italy, mainly inhabiting moderate to fast running brooks in woods and meadows, with distinct shore vegetation. This subspecies is new for Italy. The collected specimens are neither different from series of the Balkan Peninsula in the Museum Koenig, Bonn (K.F. Buchholz leg.), nor from series of the ssp. *padana* Conci, 1956, in my collection, the latter being probably a mere synonym of *festiva*. Conclusively, A. MAIBACH's (1987, *Odonatologica* 16: 145-174) proposal of synonymizing *padana* with the nominate form is considered incorrect.

Calopteryx splendens ancilla Selys, 1853. — July 25, Marepotamo R., nr Dinami, at the autostrada Mileto-Dinami, Serre Mts, Calabria, 8 ♂, 3 ♀ (heterochrome); — July 25, Amato R., alt. 200 m., bridge nr Marcellinara, 12 km W of Catanzaro, Calabria, several males and heterochrome females; — end of May 1988, Tacino R., 2 km W of Termine Grosso, Calabria. 1 ♂. K. & R. Jödicke leg. (misidentified as *C. s. xanthostoma*), coll. Mus. Zool. Lausanne (Switzerland). — The populations with androchrome females from the Acqua dell'Imperatore, Calore and Esaro Rivers, Campania (cf. G. DE MARCHI, 1990, *Odonatologica* 19: 243-250), also belong here. — This well defined and widespread, but highly variable subspecies has been overlooked and misinterpreted for more than a century. A detailed redescription is under consideration. The distributional area of this Siberian faunal element ranges from Mongolia (Mongol Altai; cf. G. PETERS, 1985, *Mitt. zool. Mus. Berl.* 61: 11-42, sub *C. splendens*) westward through southern Siberia, European Russia, Estonia, Latvia, Lithuania, Ukraine, White Russia, Poland across the Oder to eastern Germany (new subspecies for Germany; in Mark Brandenburg, Saxonia and Thuringia intergrading with the nominate form); in the SW through Rumania, Bulgaria, Greece N of the Pindos Mts, Crete, eastern "Yugoslavia", Italy (excl. Sicily), southern Switzerland (Ticino), southern France, northern Spain, western France N to the Loire R. (there intergrading again with the nominate form). *C. s. cretensis* Pongracz, 1911 and *C. s. caprai* Conci, 1956 are treated as synonyms of *ancilla*.

Calopteryx balcanica Fudakowski, 1930

(stat. nov.). — is an endemic species with broad wings and bluecoloured females, ranging from the Peloponnesus, southern and southwestern Greece (cf. H. STOBBE, 1990, *Naturk. RundBr.* 4: 5-20), Albania, Montenegro, Herzegovina to southern Dalmatia. Wing quotients of *C. balcanica* and *C. s. ancilla* (sub *caprai*) cf. P.A. GALETTI & M. PAVESI, 1983, *G. it. Ent.* 1: 247-260; C. OTTOLENGHI, 1991, *Boll. Mus. civ. St. nat. Verona* 15: 231-242.

***Cordulegaster bidentata sicilica* Fraser, 1929.**

— July 27, headwaters of the Soleo R., S of Tirivolo, alt. 1600 m, Sila Piccola Mts, Calabria, 3 ♂, 1 ♀; — July 29-Aug. 2, 1955, Camigliatello, Sila Grande Mts, Calabria, 1 ♀, J. Aubert leg., coll. Mus. Zool. Lausanne; June 26-July 7, 1955, Colorado, Calabria, 1 ♀, J. Aubert leg., coll. Mus. Zool. Lausanne. — These are the first records of this subspecies for continental Italy. All females have a dorsal yellow spot on the 10th segment and a brownish vulvar base, the female of Tirivolo even possessing a whitish yellow spot on the 11th segment. The Tirivolo specimens have smaller spots on abd. segm. 3-8 than specimens from Sicily, but the males also possess a pair of big yellow spots on the 10th tergite. A very similar undescribed form inhabits the southern Balkan region (cf. P.A. GALETTI & M. PAVESI, 1985, *G. it. Ent.* 2: 307-326). The females of the Greek series in the Museum Koenig, Bonn, have even the same brownish bases of the ovipositor as *sicilica* (cf. K.F. BUCHHOLZ, 1954, *Bonn. zool. Beitr.* [Sonderb.] 1: 51-71 [Gorgopotamus and Ossa Mts, partly misidentified as *Cordulegaster insignis* Schneider, 1845]; K.F. BUCHHOLZ, 1963, *Opusc. zool.* 70: 1-16 [sub *C. b. pictus* Séllys; cited specimens from the Taygetos Mts belong partly to *C. insignis* ssp.]).

***Cordulegaster trinacrae* Waterston, 1976.** —

A common species in the mountain regions of Calabria (Aspromonte Mt, Serre Mts, Orsomarso Mts), Basilicata (Pollino Massif), and Campania (Cilento Mts), often co-occurring with *Calopteryx virgo festiva*. This well defined Italian species does not belong to the East mediterranean *C. picta* group, but to the subgroup of western *C. holtonii* taxa (cf. D. VERSCHUREN, 1989, *Bull. Annl. Soc. r. belge Ent.* 125: 5-35).

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