

**FIRST RECORD OF *Dryophthorus corticalis*  
(COLEOPTERA: CURCULIONOIDEA, DRYOPHTHORIDAE)  
IN SERBIA**

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**ABSTRACT.** Saproxylic weevil *Dryophthorus corticalis* (Paykull, 1792) is registered in material collected in Summer 2007 in the Special Nature Reserve Zasavica, what is the first finding of this species in Serbia.

**Key words:** *Dryophthorus corticalis* (Paykull, 1792), saproxylic weevil, Zasavica, Serbia

## INTRODUCTION

Dryophthoridae is the family of pests of stored grain, as well as xylophagous or saproxylic wood-boring weevil species. Bacterial intracellular symbiosis is the main biological characteristic of these species (LEFÈVRE *et al.*, 2004).

This group is newly (ALONSO-ZARAZAGA and LYAL, 1999; ALONSO-ZARAZAGA, 2005) separated as family. A few decades ago *Dryophthorus* was just a genus included in subfamily Cossoninae, tribus Cossonini, clearly different from the other genera by possessing of five tarsal articles and four articles in antennal flagella (ANGELOV, 1979). FOLWACZNY in 1983 have noticed ideas of some contemporary taxonomists for separation of genus *Dryophthorus* into subfamily Dryophthorinae.

Dryophthorinae (common name palm weevils) now are represented by 10 species in the world, but in Palaearctic just *Dryophthorus corticalis* (Fig. 1) lives.

Despite the fact that weevil fauna in Serbia is studied at many different localities in the past 20 years (PEŠIĆ *et al.*, 2006; PEŠIĆ, 2006) and that this species is present practically in all surrounding countries, i.e. half Europe (Fig. 2), up to date it was not registered in Serbia.

The first list of weevils from the Special Nature Reserve Zasavica was published in 2007 (PEŠIĆ and STANKOVIĆ). Among the 41 species was only one from family Dryophthoridae (subfamily Rhynchophorinae), cosmopolitan *Sitophilus zeamais* (Motschulsky, 1855).

## MATERIAL AND METHODS

During the adult weevils collecting in the Special Nature Reserve Zasavica, conducted in the period 3-5th July 2007, among the other methods the Malaise trap was used. It was located at locality Turske Livade, from 14th June to 4<sup>th</sup> July 2007.

## RESULT AND DISCUSSION

Because of particular importance of swamp and freshwater habitats in Zasavica, special attention in researches was given to the registration of higr- and hidrophylous weevil species (PEŠIĆ and STANKOVIĆ, 2007). But, in 2007. by Malaise trap one male specimen of *D. corticalis* was collected.



Fig. 1. – Habitus of *Dryophthorus corticalis* (Paykull, 1792) ([http://www.zin.ru/Anima lia/Coleoptera/images/h\\_800/dryophthorus\\_corticali s.jpg](http://www.zin.ru/Anima lia/Coleoptera/images/h_800/dryophthorus_corticali s.jpg))

### Taxonomical position

According to the newest weevils taxonomy (ALONSO-ZARAZAGA and LYAL, 1999; ALONSO-ZARAZAGA, 2005) *D. corticalis* belongs to the:

Superfamily Curculionoidea

Family Dryophthoridae Schoenherr, 1825

Subfamily Dryophthorinae Schoenherr, 1825

Genus *Dryophthorus* Germar, 1824

(= *Tetraspartus* Pascoe 1885; = *Tetratemnus* Wollaston 1873)

*Dryophthorus corticalis* (Paykull, 1793) (Fig. 1).

**Material examined:** one male from Turske Livade, Zasavica, Serbia, 14/06-4/07/2005; collected by Mihajlo Stanković. Used technique: Malaise trap. Analyzed material is deposited in the collection of the authoress, at Faculty of Science, University of Kragujevac.

**Description:** *D. corticalis* is small beetle, 2.6-3.3 mm long. It has got brown body with reddish antennae and tarsi. Its snout is approximately three times longer than wide (Fig. 1).

**Ecology and distribution:** *D. corticalis* inhabits rotting wood of deciduous and coniferous trees in all Europe (HOFFMANN, 1954; ANGELOV, 1979; FOLWACZNY, 1983). Often lives close to the anthills, but it is unknown if there exist connection between ants and these beetle (ANGELOV, 1979). According to the data from Fauna Europaea (ALONSO-

ZARAZAGA, 2005) this species inhabits almost all countries bordering with Serbia (Fig. 2). Therefore its presence in Serbia was expected and finding in Zasavica finally confirms it.

Despite to the wide distribution, this species is pretty rare (ANGELOV, 1979) probably because of hidden life style and difficult collecting.

Its status concerning potential vulnerability is questionable.

This species is threatened as endangered in some countries like Germany (<http://www.fkohl.de/tree/redlist/en/Dryophthorus/corticalis/-/-/>) or critically endangered in Denmark ([http://www2.dmu.dk/1\\_Om\\_DMU/2\\_Tvaerfunkt/3\\_fdc\\_bio/projekter/redlist/data\\_en.asp?ID=3154&gruppeID=103](http://www2.dmu.dk/1_Om_DMU/2_Tvaerfunkt/3_fdc_bio/projekter/redlist/data_en.asp?ID=3154&gruppeID=103)).

In UK it is priority species requiring conservation action under the UK Biodiversity Action Plan (<http://www.ukbap.org.uk/Library/SOCC6.XLS>) because it is declared as

endangered on Red List based on pre 1994 IUCN guidelines (<http://jncc.defra.gov.uk/page-3408>). But recently it is not included in European Red List of Saproxylic Beetles (NIETO, A. and ALEXANDER, 2010) and is not evaluated at IUCN Red List of Threatened Species ([www.iucnredlist.org](http://www.iucnredlist.org)).

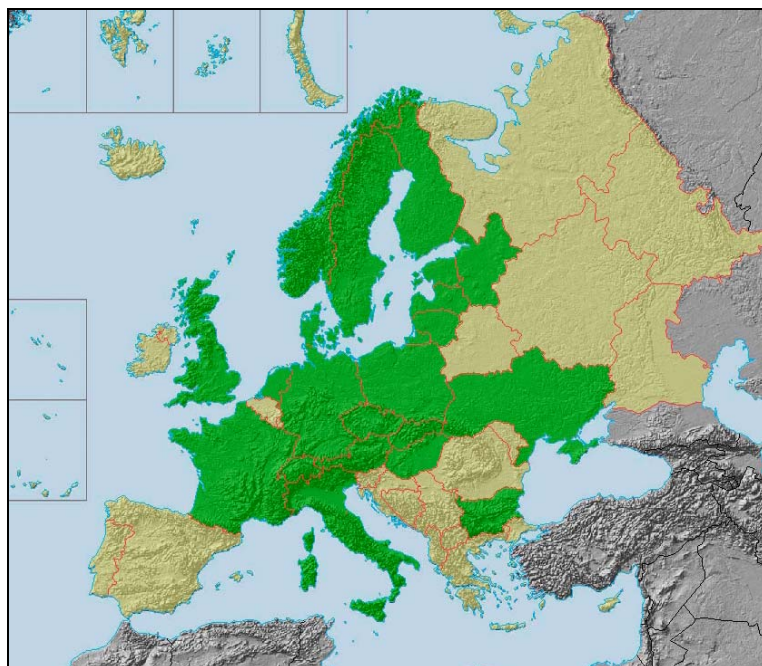


Fig. 2. – Distribution of *Dryophthorus corticalis* (Paykull, 1792) in Europe: the darkest areas (<http://www.faunaeur.org>)

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