

Arboridia kakogawana: a new pest of grapevine in southern Russia

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Abstract

Arboridia kakogawana (Matsumura) (Hemiptera Cicadellidae Typhlocybinae) is recorded as a pest of grapevine from Krasnodar Territory and Rostov Province in southern Russia. First results of the study of population dynamics of the species and damage of grapevine are presented.

Key words: *Arboridia kakogawana*, pest, grapevine, southern Russia.

Introduction

Arboridia kakogawana (Matsumura) (Hemiptera Cicadellidae Typhlocybinae) (figure 1) was described from Honshu Island in Japan (Matsumura, 1932). Later on this species was recorded from Korea (Dworakowska, 1970) and from Russian Far East (Primorsky Territory) where *A. kakogawana* inhabits broadleaved and mixed forests (Anufriev and Emeljanov, 1988). In 1999 *A. kakogawana* was discovered near Goryachy Klyuch in Krasnodar Territory in Russia (Gnezdilov, 2000). During the last 20 years that was a second case of unintentional introduction of typhlocybin species from Far East to European part of Russia. In 1988 Tishechkin recorded *Vilbasteana oculata* (Lindberg) from Moscow Province (Tishechkin, 1988). Now *V. oculata* spreaded up to St. Petersburg where it feeds on *Syringa henryi* Schneider. Penetration of both species to other European countries is rather probable.



Figure 1. *A. kakogawana* on the lower surface of a grapevine leaf (Russia, Krasnodar).
(In colour at www.bulletinofinsectology.org)

Results and discussion

During 2000–2003 *A. kakogawana* was collected in quantities on “Isabella” and “Moldova” grapevines in Krasnodar (Sugonyaev *et al.*, 2004). In 2006–2007 the species was collected also in Rostov Province (near Rostov-na-Donu, Novocherkassk, and Salsk) where *A. kakogawana* damaged about 70 different kinds of grapevine.

According to survey in Krasnodar only solitary adults of *A. kakogawana* may be found in late May and early June. At 20th–22nd of June nymphs and adults of the species were found in great numbers on leaves of grapevine. At 1st of July 3.4 specimens of *A. kakogawana* per leaf (totally 152 nymphs and 193 adults per 102 leaves) were recorded. Maximal number of specimens on grapevine was recorded in the second half of August and in September.

Adults and nymphs concentrate on lower surface of grapevine leaves. Nymphs form dense colonies sucking mainly along central vein of leaf and its lateral branches. Number of specimens varies from several ones up to 80 specimens on leaf. As a result of sucking of nymphs and adults the leaves of grapevine have yellow dots, especially along central vein. In consequence of sucking of *A. kakogawana* the leaves of grapevine turn yellow prematurely which negatively influencing on maturation of grapes.

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