RUSSIAN ACADEMY OF SCIENCE DEPARTMENT OF BIOLOGICAL SCIENCES RAS



INSTITUTE FOR BIOLOGY OF INLAND WATERS RAS



SCIENTIFIC COUNSIL OF HYDROBIOLOGY AND ICHTYOLOGY



A.N. SEVERTSOV INSTITUTE OF ECOLOGY AND EVOLUTION RAS

INTERNATIONAL UNION OF BIOLOGICAL SCIENCES
COMMISSION ON PRESERVATION OF A BIOLOGICAL DIVERSITY RAS
DEPARTMENT OF BIOLOGICAL RESOURCES OF U.S. GEOLOGICAL SERVICE (USGS)
U.S. FISH AND WILDLIFE SERVICE (US FWLS)
INTERNATIONAL SOCIETY OF ZOOLOGY SCIENCES (ISZS)
RUSSIAN HYDROBIOLOGICAL SOCIETY AFFILIATED WITH RAS
SCIENTIFIC COUNCIL ON STUDY, PROTECTION AND RATIONAL USE OF ANIMALS RAS
"BIOGEN-ANALYTIKA", EQUIPMENT FOR LIFE SCIENCE RESEARCH

PROGRAMME & BOOK OF ABSTRACTS



RUSSIAN ACADEMY OF SCIENCE

DEPARTMENT OF BIOLOGICAL SCIENCES RAS

INSTITUTE FOR BIOLOGY OF INLAND WATERS RAS

A.N. SEVERTSOV INSTITUTE OF ECOLOGY AND EVOLUTION RAS

SCIENTIFIC COUNSIL OF HYDROBIOLOGY AND ICHTYOLOGY

INTERNATIONAL UNION OF BIOLOGICAL SCIENCES

COMMISSION ON PRESERVATION OF A BIOLOGICAL DIVERSITY RAS

DEPARTMENT OF BIOLOGICAL RESOURCES OF U.S. GEOLOGICAL SERVICE (USGS)

U.S. FISH AND WILDLIFE SERVICE (US FWLS)

INTERNATIONAL SOCIETY OF ZOOLOGY SCIENCES (ISZS)

RUSSIAN HYDROBIOLOGICAL SOCIETY AFFILIATED WITH RAS

SCIENTIFIC COUNCIL ON STUDY, PROTECTION AND RATIONAL USE OF ANIMALS RAS

"BIOGEN-ANALYTIKA", EQUIPMENT FOR LIFE SCIENCE RESEARCH

PROGRAMME & BOOK OF ABSTRACTS

Editors:

Yu. Yu. Dgebuadze, Yu. V. Slynko, A. V. Krylov

Technical Assistance:

L. I. Tereshchenko., E. N. Pakunova

Publisher:

Publisher's bureau "Филигрань", Yaroslavl

ECOLOGICAL CATASTROPHE: THE EMERALD ASH BORER (AGRILUS PLANIPENNIS) IS DESTROYING ASHES IN NINE OBLASTS OF EUROPEAN RUSSIA

M. Ja. Orlova-Bienkowskaja

A.N. Severtsov Institute of Ecology and Evolution, Russian Academy of Sciences, Moscow 119071, Leninskiy pr. 33, e-mail: marinaorlben@yandex.ru

The emerald ash borer *Agrilus planipennis* is the most dangerous invasive pest of ashes. It has killed millions of ash trees in North America. In 2003 the pest was firstly found in Europe in the city of Moscow. Then it was found in some localities of Moscow oblast and Smolensk oblast. Our examination of ash trees in 19 cities of European Russia has revealed, that the invasive area is much wider than it was previously believed. The pest has been found in Konakovo (Tver oblast), Michurinsk (Tambov oblast), Tula, Kaluga, Orel, Voronezh and Yaroslavl. We have found out, that *A. planipennis* damages not only *Fraxinus pennsylvanica* (American species which is commonly planted in cities), but also the aborigenous European ash *Fraxinus excelsior*. The most of ashes in Moscow oblast are dying or already dead. Thousands of trees in other regions are seriously damaged. The pest is spreading rapidly. Obviously, it will cross the western border of Russia within the nearest few years. Ashes in cities, forests and protective forest belts both in Russia and other countries are in danger.

The range of A. planipennis in European Russia is shown in the map. Black dots – localities, where the pest has been found, white dots – localities, where the trees have been examined, but the pest has not

been found. The assumed range is colored with gray.



The research has been supported by the Program of Presidium of Russian Academy of Sciences "Wildlife" - "Invasions".