

Russian Academy of Sciences
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Botanical Garden-Institute

A B S T R A C T S

of the symposium

**The East Asian Flora
and its role in the formation
of the world's vegetation**

**Vladivostok, Russia
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Abstracts of the symposium "The East Asian Flora and its role in the formation of the world's vegetation", Vladivostok, Russia, September 23–27, 2012. Vladivostok: BGI FEB RAS, 2012. 100 pp.

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Editors: Pavel V. Krestov & Andrew N. Gillison

Тезисы докладов симпозиума «Флора Восточной Азии и ее роль в формировании растительного покрова мира», Владивосток, Россия, 23–27 сентября 2012 г. Владивосток: БСИ ДВО РАН, 2012. 100 с.

В брошюре представлены тезисы докладов симпозиума «Флора Восточной Азии и ее роль в формировании растительного покрова мира», состоявшегося во Владивостоке, Россия, 23–27 сентября 2012 года.

Редакторы: П. В. Крестов, А. Н. Гиллисон

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A topography-based model of the vegetation cover of the Lanzhinskie Mountains

Alexander M. OMELKO, Anna N. YAKOVLEVA

Institute of Biology and Soil Science FEB RAS, Vladivostok, Russia

Омелько А.М., Яковлева А.Н. Модель растительного покрова Ланжинских гор на основе топографических переменных

By means of the GAM technique it is possible to create detailed maps of the potential vegetation for regions that are difficult to access. This is particularly important for wide mountain areas of Northeast Asia, where such maps have never been created. High-resolution DEMs permit increased prediction accuracy and modeling of complex vegetation patterns. Most vegetation types in the area are controlled mainly by the moisture regime and by regimes of sediment transport and accumulation. The relatively small amounts of rainfall in the continental climate are distributed spatially by relief elements. This creates a wide range of soil moisture regimes: from very dry, with a prolonged period of moisture deficit, to wet, without moisture deficit during the growing season at all. Therefore, moisture appears to be a critical resource in this climatic region, and it is a main differentiating factor for the vegetation. The map of potential vegetation, obtained satisfactorily, reflects altitudinal zonation and inter-zonal patterns of vegetation distribution. The area occupied by some vegetation communities is overestimated, however, due mainly to insufficient DEM resolution.