

## **BIOLOGICAL PROPERTIES, TOTAL AND LABILE ORGANIC MATTER OF LOAMY-SAND SPODOSOL WITH MINERAL FERTILISER APPLICATION**

**L. V. Boitsova**

*Agrophysical Research Institute, 14 Grazhdanskiy prospekt. St. Peterburg, 195220, Russia*

*E-mail: larisa30.05@mail.ru*

Biological properties as well as contents of total organic carbon and of the light fraction of soil organic matter were measured in a loamy- sandy Spodosol with mineral fertilizer application. The field experiment was conducted in 2007-2009 and contained plots with three treatments: control (no fertilizer), conventional system of fertilizer application and precision system of fertilizer application.

It was found that precision system of fertilizer application resulted in accumulation of light fraction of soil organic matter in the studied soil but had no significant effect on the total soil organic carbon content or the soil biological activity.

**Key words:** emission of carbon dioxide, denitrification, light fraction of soil organic matter, soil organic matter, loamy-sand Spodosol.