

## The problem of representation of stratified sampling report as an example of GIL Kaluga region

**B. N. Moiseev** – Candidate of Agricultural Sciences

**A. N. Filipchuk** – Doctor of Agricultural Sciences, Deputy Director,  
Russian Research Institute for silviculture and mechanization of forestry

*The State forest inventory is a combination of random and systematic sampling provides a method of the inevitability of the existence of systematic errors of measured indicators of GIL. Systematic sampling errors arise from the characteristics of the system of selection and processing of observational data, or in connection with the irregular selection. Using mathematical tools, you can eliminate the random errors, but not systematic, so you must implement the logical analysis of the causes of these errors and develop measures to address them. The article describes some of the errors of representativeness in the sample report, GIL Kaluga region.*

*As a result of the analysis of the material by the Kaluga region GIL Report concluded that the results of GIL in the Kaluga region. Cannot serve as a quantitative characteristic of forests, since data RFP do not reflect real stock of striations, and secondary reserves in the region. In the report there is no table distribution of stocks by species and age class is the classical Foundation of quantitative and qualitative characteristics of forests in the region.*

*To resolve this problem, use the proposal V.Arkipova, which «is based on the idea of convergence, the convergence and integration of z-x systems SFA set forth works (forest inventory and GIL) based on borrowing from each other positive traits and qualities». Result of the inclusion of forest inventory in the technological chain GIL will be the classic method of taking of inventory of forests with the following hierarchy: universe  $\Rightarrow$  forest strata  $\Rightarrow$  forest taxation separation  $\Rightarrow$  area  $\Rightarrow$  model tree.*

**Key words:** State forest inventory, representativeness, sample plot, Kaluga region