## THEORY OF PLANE-PARALLEL MOTION OF THE SELF - PROPELLED ROOTS HARVESTING MACHINE

## Volodymyr M. BULGAKOV<sup>1</sup>

**Abstract:** The paper present method to constructing calculated model of flat parallel movement of root harvester. The equations in Lagrange form of the second degree were adopted as initial equations. On results of numerical solution of obtained system of differential equations on computer and investigation by Lyapunov method were determined the dynamic characteristics of root harvester. Obtained dependencies might be applied for theoretical investigations of other mobile machinery aggregates.

*Key words:* root harvester, dynamic model, mathematical model, computeraided simulation.

<sup>&</sup>lt;sup>1</sup> National Agricultural University of Ukraine, Kiev, Ukraine.