

GLOBAL EXISTENCE FOR TREE-GRASS COMPETITION MODEL

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ABSTRACT. We present a tree-grass competition model on the basis of the forest kinematic model due to Kuznetsov-Antonovsky-Biktashev-Aponina [6]. The main purpose of the paper is to construct global solutions and to construct a dynamical system generated by the model equations. By numerical computations, we also show that our model actually admits coexisting solutions of trees and grass.

Key words and phrases. Global solution, Dynamical system, Tree-grass coexistence.