

This study aimed to assess the effects of tree manures in comparison with NPK fertilizer on growth of *Acacia senegal* seedlings. It was conducted in the nursery of the Faculty of Forestry, Shambat, during August 2008 and January 2009. The growing media were prepared by mixing ground foliage of tree with a clay soil (weight/volume) as follows:- *Albizia lebbbeck* (AL): 25 g, 50 g and 75 g; *Azadirachta indica* (AZ): 25 g, 50 g and 75 g; *Khaya senegalensis* (KH): 25 g, 50 g and 75 g; NPK fertilizer: 30 g per seedling. *A. senegal* seed germination percentage increased significantly in tree manures in comparison with NPK and control media. *A. senegal* seedlings' growth in the treatments varied as follows:- AZ = NPK > AL > KH > control for shoot length; KH > AL > AZ > NPK > control for root length; AZ > NPK > KH > AL > control for diameter; NPK = AZ > AL > KH > control for shoot biomass and AZ > NPK > KH > AL > control for root biomass. Therefore, *A. senegal* seedlings' growth was higher in *A. indica* and NPK fertilizer media, moderate in *A. lebbbeck* media and poor in *K. senegalensis* and the control media. However, the root growth occurred at an opposite rate outlined for the other growth parameters. These findings indicate good fertilizing and ameliorating potential of tree manures and can be used in nursery growing media and as substitutes for inorganic fertilizers.