



Carbon Stock Assessment of Selected Tree Species in Maharshi Dayanand University Campus, Rohtak (Haryana) India

Abhishek Nandal, Neetu Singh, S.S. Yadav*, A.S. Rao and V.S. Yadav¹

Department of Botany, Maharshi Dayanand University, Rohtak-124 001, India

¹Govt. Senior Secondary School, Baghot (Mahendergarh) Haryana.

*E-mail: ssyadavindia@gmail.com

Abstract: *Azadirachta indica*, *Callistemon lanceolatus*, *Eucalyptus globulus*, *Ficus virens*, *Pongamia pinnata* and *Terminalia arjuna* were selected for carbon stock estimation. Field survey method was used for sampling trees. Carbon stock of dominant tree species was calculated with allometric equations. The carbon stock was 366.82 Mg in *Eucalyptus globulus*, 35.23 Mg in *Pongamia pinnata*, 30.79 Mg in *Callistemon lanceolatus*, 23.75 Mg in *Azadirachta indica*, 22.32 Mg in *Ficus virens* and 7.91 Mg in *Terminalia arjuna*. Maximum carbon stock was found in *Eucalyptus globulus* and minimum in case of *Terminalia arjuna*. The data obtained from the present study can be used to assess the role of trees in reducing the atmospheric CO₂. The study will also be useful in calculating the carbon budget of the educational institutions and urban settlements in near future.

Keywords: Carbon stock, Climate change, Carbon sequestration, Carbon budget and trees
