

CARBON SEQUESTRATION CAPACITY OF DIFFERENT NATURAL WEED FLORA UNDER RAINFED ECOSYSTEM

Adikant Pradhan*, S.S. Rao¹, P.S. Kusaro², S.K. Nag³ and A. Sao⁴

Email: adi_197753@rediffmail.com

²Dean, S.G. College of Agriculture and Research Station, Jagdalpur

³Scientist, Soil Science, S.G. College of Agriculture and Research Station, Jagdalpur

⁴Scientist, Economics, S.G. College of Agriculture and Research Station, Jagdalpur

⁵Scientist, Genetics, S.G. College of Agriculture and Research Station, Jagdalpur

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Abstract: A survey was conducted in the region selecting 6 villages to assess the natural floral composition and its dynamics during *Kharif* and *Rabi* 2013. Sequestration of carbon due to spatial occurrence of flora affected significantly with attaining biomass by plants. The dry matter includes tillers, leaves and flowering parts are directly proportionate to carbon sequestration capacity leading a higher carbon sequestration as 6.37 g in *Spaeranthus indicus* Linn, 4.75 g in *Heliotropium indicum* Linn, 6.03 g in *Alternanthera sessile* (L.) R.Br., 4.85 g in *Malva coramendelum* (L.) Garcke, 5.18 g in *Polygonum hydropiper* L. and 4.89 g in *Gomphrena celosoides* Mart among observed species, which were more than 4 g per plant in nearly 6 months life cycle under natural rainfed ecosystem. Among the narrow leaved flora, *Rottboellia exalata* L., *Iseilema laxum* Hack, *Echinochloa crusgalli* P. Beauv, *Aritida ascensionis* L., *Coix lacrymma-Jobi* L., *Cyperus defformis* L. And *Themeda japonica* L. stored higher biomass as 3.85, 17.29, 6.65, 4.28, 7.36, 7.41 and 6.65 per plant, respectively over remaining species of terrestrial flora.

Keywords: C-sequestration capacity, Weeds, Plant biomass, Weed ecosystem

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*Corresponding Author