

International Journal of Forestry and Crop Improvement



Volume 8 | Issue 1 | June, 2017 | 24-29 | ■Visit us: www.researchjournal.co.in

RESEARCH ARTICLE

DOI: 10.15740/HAS/IJFCI/8.1/24-29

Morphological characterization and identification of Populus deltoides Bartr. crosses

SNEHA DOBHAL, SANJEEV THAKUR AND RAJ KUMAR

ABSTRACT: Leaves are of fundamental importance to plants, representing their facility to generate power and are the sensing units of plants towards the environment. In this study, an attempt was made to characterize and compare the variations of leaf, stem and petiole morphology of various *Populus deltoides* Bartr. crosses. In order to achieve these objectives, twelve crosses of *P. deltoides* Bartr. were evaluated for different parameters. On the basis of various morphological characteristics the results revealed that each cross has a distinct color pattern of leaves. Different colors observed in these crosses varied from yellow green to green. Distinct nature of the stem altitude was found. Anthocyanin distribution of leaves was also found. In this study, the morphological traits of leaves and petiole provided discriminatory grounds for separating various populations of *P. deltoides* Bartr. crosses. Character of stem studies indicates that different crosses vary considerably with regard to shape, colour and nature.

KEY WORDS: Populus deltoides Bartr., Leaves, Morphology, Petiole

HOW TO CITE THIS ARTICLE: Dobhal, Sneha, Thakur, Sanjeev and Kumar, Raj (2017). Morphological characterization and identification of *Populus deltoides* Bartr. crosses. *Internat. J. Forestry & Crop Improv.*, **8** (1): 24-29, **DOI:** 10.15740/HAS/IJFCI/8.1/24-29.

ARTICLE CHRONICAL: Received: 30.01.2017; Revised: 29.04.2017; Accepted: 10.05.2017

MEMBERS OF RESEARCH FORUM

Address of the Correspondence : SNEHA DOBHAL, Dr. Y.S. Parmar University of Horticulture and Forestry, Nauni, SOLAN (H.P.) INDIA

Email: snehadobhal001@gmail.com

Address of the Coopted Authors: SANJEEV THAKUR, Dr. Y.S. Parmar University of Horticulture and Forestry, Nauni, SOLAN (H.P.) INDIA

RAJ KUMAR, ICAR-IISWC, RC, VASAD, ANAND (GUJARAT) INDIA