ABSTRACT

The present research work was carried out to evaluate the anatomical adaptations of *Prosopis cineraria* (L.) Druce and *Capparis decidua* (Forssk.) Edgew. The plant naturally grow and well adapted in arid and semi-arid region. The natural population of both plants are mostly confined to graveyard and also surviving along roadsides. The plants were collected from two location to investigate the anatomical adaptation in these diversified habitats and enable these plants to survive. Anatomical variation in species were observed and found out that plants collected from different showed significant results as compared to roadside plants.in *Prosopis cineraria* (L.) Druce the paracytic stomata with largest length in T.T.Singh graveyard was 47.5±10.7 in largest abaxial ,subsidiary cell in T.T.Singh graveyard was 114.5±16.5 largest adaxial epidermal cell in Rajana roadside was 109.23±30.2.the largest vessel in Rajana graveyard was 41.8±6.2 and largest pith cell in Kamalia roadside was 28.2±2.5.in *Capparis decidua* (Forssk.)Edgew largest pith cell, sclerenchyma, metaxylem, protoxylem were Samundri graveyard 41.5±3.2, Kamalia graveyard 52.7±14.9, T.T.Singh roadside 30.5±3.5 and T.T.Singh graveyard 21.3±2.1 respectively. Overall, it was observed that plants structural analogy further contributes to the spread of this plants in graveyard site