

ABSTRACT

Comparative anatomy of the stem, petiole, tendrils and fruit stalk of nine species of family Cucurbitaceae has been studied. Selected plant species (*Citrullus lanatus* (Thunb.) Mastum & Nakai, *Cucumis melo* var. *agrestis* Naudin, *Cucumis melo* var. *momordica* (Roxb.) Duthie & Fulle, *Cucumis melo* Linn., *Praecitrullus fistulosus* (Stocks) Pangalo, *Lagenaria siceraria* (Molina) Standl, *Luffa acutangula* Roxb., *Momordica charantia* L., *Cucumis sativus* Linn.) were collected from different areas of Kasur city. The plant parts were fixed, hand sectioned, stained and photographed with OPPO F11 mobile camera 48MP. The study has revealed, there are similarities in nature of epidermis and types of vascular bundles in stem, petiole, tendril and fruit stalk. But there are variations in thickness of collenchymatous and sclerenchymatous layers. The number of vascular bundles are also different in different plant parts under consideration. The variations in number of layers of tissues, presence or absence of trichomes can be used as a tool for taxonomic considerations of these Cucurbits.