

present in quite a considerable amount. Flavonoids have shown potential antioxidant and anti-inflammatory activity which are attributed to an increased capillary permeability, and have been also associated in the treatment of various cardiovascular diseases (Crespy 2002). Tannins have a strong astringent action and are reported to have antibacterial, anti-inflammatory, antiviral and antioxidant activity (Kapu et al. 2001; Schulz et al. 2002). Alkaloids have been reported to possess wide range of therapeutic importance in the fields of cancer, malaria, pain, inflammation, Parkinsonism, hypertension and number of central nervous system disorders (Rhaman and Bruce 2002). Phenolic compounds play beneficial role in active quenching of oxygen-derived free radicals, thus neutralizing them by donating hydrogen atoms or electrons to free radicals. Therefore, they are considered as strong antioxidants with anticarcinogenic, antibacterial and anti-inflammatory activity and are also used in coronary heart disease and some types of tumours (Yildiz et al. 2011; Shukla et al. 2012). The presence of high phenolic compounds in *P. hexapetalum* can act as a good source of natural medicine.

#### 14.4 CONCLUSION

Herbal medicines have been enjoying revitalization all over the world. There are hundreds of medicinal plants that have a long history of curative properties against various diseases and ailments. However, screening of plants for their activity is very crucial and needs imperative attention in order to know the value of the plant. The assessment of the plants for their therapeutic activity is done on the basis of either their chemotaxonomic examination or ethnobotanical information for a particular disease. These obtained data can support the standardization parameters such as microscopy, scanning electron micrographs, fluorescence and preliminary phytochemical investigations, which could be helpful for proper authentication. A set of quality parameters for the standardization of these plants as herbal preparations will ensure the reproducibility of their therapeutic effects. In this manner, the therapeutic potential of these medicinal plants can be best harnessed towards a possible integration into the healthcare system.

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