protein synthesis and consequent depletion in levels of total free amino acids in infected as compared to healthy liver tissue. Depleted levels of pyruvate and lactate, despite considerable glycogenolysis as observed by Gupta and Agarwal[2] in infected liver, corroborate this.

Total protein levels in the cyst wall, more than twice that of metacercaria, suggest the cyst material to be highly proteinaceous. Activity of GPT, although higher than in metacercaria, is not as prominent in the cyst wall. The most remarkable feature of the cyst wall, however, is the relatively very high GOT activity (more than 4 times that of metacercaria and thrice that of host tissue). This is clearly related to extensive transamination of substrates of energy metabolism into amino acids and, *via* the aspartate family of amino acids, into pyrimidines, and eventually their incorporation into proteins and nucleic acids in the metacercaria growing within the cyst wall. Relatively high alkaline phosphatase activity in metacercaria[2] suggests active uptake of these by the growing metacercaria.

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A NOTE ON THE PHYTOCHEMICAL CONSTITUENTS OF SOME BIGNONIACEAE

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THE chemotaxonomy of Bignoniaceae is little known[1]. The present work on the chemotaxonomy of 14 species spread over 10 genera is taken up to fill the gap.

The following taxa have been collected during different periods and in different localities as mentioned in the parenthesis. *Anemopaegma scandens* Mello ex K. Schum (December, 1983, Public Garden, Hyderabad, India), *Bignonia gracilis* Lodd. (November, 1983, Public Garden, Hyderabad), *B. magnifica* Bull (November, 1983, Begumpet, Hyderabad), *B. purpurea* Lodd. ex Sweet. (December, 1983, S. R. Nagar, Hyderabad), *Crescentia cujute* L. (August, 1983, Kakinada, India), *Jacaranda mimosaefolia* D. Don. (November, 1983, Public Garden, Hyderabad), *Kigelia pinnata* (N. A. Jacq.) DC., (December 1983, Public Garden, Hyderabad), *Millingtonia hortensis* L.f. (November, 1983, Begumpet, Hyderabad), *Parmentiera cereifera* Seem. (December, 1983, Osmania University Campus, Hyderabad) *Pyrostegia venusta* (Ker-Gawl) Miers. (October, 1983, Public Garden, Hyderabad), *Spathodea companulata* Beauv. (October, 1983, Nizam College, Hyderabad), *Tecoma capensis* Lindl. (November, 1983, Begumpet, Hyderabad), *T. smithii* × Hort. ex Garten. (October, 1983, Public Garden, Hyderabad) and *T. stans* (L.) H. B. & K. (November 1983, Nizam College, Hyderabad). Standard tests with the fresh leaves and stems as well as 80% ethanolic extracts of the above taxa have been carried out to screen the presence of various phytochemical constituents.

Uniformly negative results are obtained for alkaloids, anthraquinones, cyanogenic glycosides (HCN test), Juglone (Juglone test A) and lignans and uniformly positive results for free phenols and syringyl radicals (Maule test). Notwithstanding the similarities in the above chemical characters, the taxa in the present study seem to be distinct in the possession of some chemical constituents, with restricted distribution. Thus, aucubin compounds (Ehrlich test) are found to be present in *Anemopaegma, B. gracilis, B. magnifica, Kigelia, Pyrostegia, Spathodea, T. capensis,*

T. smithii, and *T. stans*; the catechol-tannins (HCl/Methanol or Isenberg Buchnan's test) in *B. gracilis*; ellagic acid in traces in *B. magnifica*, *Kigelia*, *Millingtonia* and *Parmentiera*; indoles (indoles test) in *T. capensis*; leucoanthocyanins (Leucoanthocyanin test A) in *B. gracilis*, *B. magnifica* and *Crescentia*; methylene dioxy compounds (Labat test) and Saponins (Saponin test A) in *T. stans*; syringaldehyde (Syringin test) in *B. gracilis* (the presence of syringaldehyde seems to be rather doubtful in *T. capensis*); free tannins (tannin test A) in *Spathodea* and triterpenoids/steroids (Liebermann-Burchard and Salkowski tests) in *Anemopaegma*, *B. magnifica*, *B. purpurea*, *Kigelia*, *Millingtonia*, *Pyrostegia*, *T. capensis* and *T. stans*. The activity of the enzyme polyphenolase (Cigarette and Hot water tests) is found to be negative in *Parmentiera* and positive in others. The results of the tests conform to those of the few carried out on a few taxa earlier[1].

The taxa in the present study could be identified on the basis of some of the above chemical characters.

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ANTIFUNGAL ACTIVITY OF *PARTHENIUM HYSTEROPHORUS* LINN.

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PARTHENIUM HYSTEROPHORUS Linn. of family asteraceas was reported[1] for the first time from India. This weed is now widely disseminated in the country. Rao[2] indicated the fear of causing dermititis and other forms of allergy by this weed without giving sufficient proof. Mall and Dager[3] studied the inhibitory effect of its extracts in the seed germination of maize, jawar and arhar.

In the present study antifungal activity of the aqueous extracts of inflorescence, leaves, stems and root of *P. hysterophorus* was studied against a dermatophyte and four species of *Aspergillus* by filter paper disc method[4]. The aqueous extracts of different plant parts were obtained by the method adopted by Mall and Dager[3] and the fungi were isolated during a survey of kerationphilic fungi and dermatophytes from soil[5]. Extract of inflorescence caused maximum inhibition zone (380 mm^2) of *A. niger* and minimum of *A. flavus* and *M. gypseum*. The root extract caused minimum inhibition of these five fungi. Lower concentration (10 ppm) could not show inhibition of any fungus studied here. However, all the fungi were sensitive to extract of different plant parts. Minimum inhibitory concentrations of the extracts of inflorescence, leaves and stem were (100 ppm) and of root extract was (1000 ppm) for *A. fumigatus*, *A. niger*, *A. sulphureus* and *M. gypseum*.

This study makes the first report of antifungal activity of *P. hysterophorus* against a dermatophyte, *M. gypseum* and four species of *Aspergillus*.

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