

Limnocythere bhatiai Bajpai *et al.*, *Frambocythere tumiensis anjarensis* Bhandari and Colin, *Paracyprretta jonesi* Bhatia and Rana, *Zonocypris gujaratensis* Bhandari and Colin, *Zonocypris spirula* Whatley and Bajpai, *Paracandona firmamentum* Whatley and Bajpai, *Cyclo-cypris amphibolos* Whatley *et al.*, *Cypria cyrtionidion* Whatley and Bajpai, and *Cyprois rostellum* Whatley and Bajpai. Six species are left in open nomenclature: *Cypridopsis* sp. A, *Cypridopsis* sp. B, *Eucypris* sp. A, *Eucypris* sp. B, *Eucypris* sp. C and *Limnocythere* sp. These ostracods are associated with abundant charophytic flora and rare fish teeth.

The ostracod fauna of Mohgaon-Haveli shows affinity to the ostracod assemblages recorded from the Inter-trappean beds of Anjar^{6,7}, Lakshmipur⁸ and Korā⁹, all in Kachchh District, Gujarat; Takli, Nagpur, Maharashtra^{10,11}; Chandarki and Yanagundi, Gulbarga District, Karnataka¹²; Mamoni, Kota District, Rajasthan¹³; Mohgaokala, Chhindwara District⁵ and Phulsagar, Mandla District, MP¹⁴.

The non-marine Inter-trappean beds of Peninsular India have been by and large assigned a Late Cretaceous, Maastrichtian age based on localities whose absolute age is known from radiometric dates obtained on the basalt flows that constrain them. Most modern studies on the age of the Deccan Traps, based on radiometric analyses, indicate that the volcanic activity was initiated during the Maastrichtian, at about 68 My and ceased during the early Palaeocene at around 60 My, with the major pulse at 65 My¹⁵⁻¹⁸.

So far as palaeoecology of the ostracod fauna recorded from Mohgaon-Haveli is concerned, except for the genera *Eucypris* and *Cyprois*, which are indicative of temporary pool environment, all other genera, viz. *Limnocythere*, *Frambocythere*, *Cypria*, *Cypridopsis*, *Cyclo-cypris*, *Paracyprretta*, *Zonocypris*, *Darwinula* and *Paracandona* are suggestive of existence of permanent pond waters during deposition of Inter-trappean bed at Mohgaon-Haveli.

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Parkia Powder Agar – A new medium for fungal culture

Parkia biglandulosa Weight & Arn. (subfamily Mimosoideae and family Leguminosae) is a tree species distributed in tropical regions of South America, Asia and Africa^{1,2}. In India, it is found in parks and as avenue trees. Pods attain maturity during March to May and hang from the peduncle in clusters. The pods produce a creamy-white powder with flour-like texture. Experiments were conducted to test the ability of the powder to serve as nutritive source in microbiological media and its suitability to culture fungi. The results revealed that the powder

supported fungal growth. A new medium was formulated and named as *Parkia* Powder Agar (PPA) and reported here.

Ten mature and dried pods collected from Mangalore, Goa and Gulbarga University campuses were surface-cleaned by swabbing with cotton dipped in alcohol. Pods were gently opened and using a clean brush, the powder was harvested onto a petri plate. The quantity of powder harvested per pod was 3.5 g from Mangalore followed by 1.3 and 1.0 g in Goa and Gulbarga respectively. The powder as well as the pods emitted a characteris-

tic odour. Total carbohydrate and protein content of pooled powder sample was estimated using the method of Anthrone³ and Lowry⁴, respectively. Concentration of carbohydrate was 80 to 85 g/100 g of powder and that of protein was 5.3 g/100 g.

Twenty grams of *Parkia* pod powder was mixed well with distilled water by stirring in a beaker under constant heating. After the powder was mixed well, 20 g of agar-agar was added. Stirring and heating continued till the solution became homogenous. Final volume of the solution was made up to 1000 ml. pH

Table 1. Comparison of fungal growth on PPA and PDA

Fungus	Colony size (dia in mm)							
	PPA						PDA	
	2% powder		4% powder		6% powder		3 days	5 days
	3 days	5 days	3 days	5 days	3 days	5 days		
<i>Helminthosporium turcicum</i>	28	57	27	55	18	23	35	70
<i>Colletotrichum graminicola</i>	30	32	22	31	30	63	42	75
<i>Penicillium ochraceous</i>	23	40	23	34	23	28	25	41
<i>Aspergillus niger</i>	22	38	23	34	21	26	23	40
<i>Candida albicans</i> *	++	++	++	++	++	++	++	++

*Colonies grew luxuriously on streaked areas and hence it was not possible to measure colony diameter. Visual observations (++) were made.

was adjusted to 7. The solution was transferred to five 250 ml capacity conical flasks and plugged with absorbent cotton and sterilized in an autoclave at 15 psi for 15 min. The conical flasks were taken out and 30 ml of this solution was poured into each petri plate. Before pouring, a few drops of 0.01% streptomycin solution was added to the petri plates to avoid bacterial contamination. The medium became semi-solid within 30 min and was ready for inoculation and fungal culture.

To test the growth of fungi on PPA medium, mycelium from actively growing pure cultures of *Colletotrichum graminicola* (isolated from sorghum leaves showing anthracnose lesions), *Penicillium ochraceous* (a saprophyte isolated from soil), *Helminthosporium turcicum* (isolated from blight-affected sorghum leaves), *Aspergillus niger* (isolated from onion bulbs) and *Candida albicans* (a human pathogen obtained from a hospital), were separately inoculated in petri plates with PPA medium following the method by Aneja⁵. Similarly, the same fungi were inoculated on petri plates having PDA medium for comparison. Observations were made on the 3rd and 5th day to record colony growth. PPA supported good growth and sporulation in all these fungi (Table 1). Mycelial growth and spore production were normal. Although the colony growth of these test fungi was good on PPA, it was better on PDA.

Growth of *C. albicans* was equally good in both media.

Seeds of *P. biglandulosa* have been analysed and their use as a potential source of low-cost fat, proteins and gums has been reported⁶⁻⁸. However, biochemical analysis of the powder has not been made so far. The present study reveals that the powder is rich in carbohydrates and proteins and supports good fungal growth. The use of PPA is economical compared to the cost of dehydrated PDA medium (Rs 1550/500 g, based on price list of Ms Colloids Implex Pvt Ltd, Madrid, Spain for the year 2005-06 and Rs 1275/500 g, based on price list of M/s HiMedia Laboratories Pvt Ltd, Mumbai, India for the year 2005-06). Therefore, PPA (comprising 20 g of *Parkia* pod powder along with 20 g of agar-agar in 1000 ml of water) is recommended as a medium for routine fungal culture.

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