fluffy colonies emerged from the spots after 48 hours and produced black diffusible pigments into the medium. Later, the colonies turned into olive colour but did not sporulate when incubated under total darkness. Exposure to day light fluorescent lamps or near ultra violet light (F 40 - BLB/U. S. A. Sylvania) for 12 hours followed by darkness induced sporulation. On the basis of conidial measurements, morphology and development the causal organism was identified as *Alternaria alternata* (Fr.) Keissler. Koch's postulates were followed in confirming the pathogenicity of this isolate.

FIG. 1. Typical veinal necrosis in leaves of *Arachis hypogea*.

Serial hand sections of the lesions revealed complete browning of the mesophyll tissue. Both epidermal and palisade cells were filled with brown substances and in some lesions conidiophores and conidia were seen on the upper epidermis.

The germinating fluid of the conidia was collected by incubating the conidia harvested from 10–day old cultures raised on potato dextrose agar. This was separated from the germlings by low speed centrifugation and the supernatant was tested for its phytotoxicity on detached leaves. Necroric flecks appeared after 48–60 hours of incubation under moist chamber. The germinating fluid was extracted with an equal volume of ethyl acetate and the extract was evaporated to dryness when a colourless residue was obtained. This residue was suspended in ethyl acetate and partitioned in a TLC plate using toluene: ethyl acetate ; formic acid (6 : 3. : 1) as the developing system. There was a blue fluorescing region near the solvent front which was then eluted in 2 ml of distilled water. A few drops of this fraction were placed on detached leaves of groundnut and incubated in a moist chamber. Typical necrosis appeared after 48–60 hours which extended into veins and veinlets. This fraction had an Rf value of 0·93. Of particular interest is the point that acidified ethyl acetate extracts of culture filtrates of different age levels, *viz.*, 10, 15 and 20 showed this particular fraction which is phytotoxic. Studies on the chemical nature of this substance are under way.

There was an earlier report of *Alternaria arachidis* on *Arachis hypogea* by Kulkarni[1], where he considered it as a new species based on conidial morphology. However, the disease symptom presented here is quite different from that of the reported one and furthermore, the caused organism fits into the characters of *A. alternata* described. The literature suggests that this is the first record of veinal necrosis on *A. hypogea* by *A. alternata* in India.

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SCREENING OF *JASMINUM* SPECIES AGAINST YELLOW RING MOSAIC VIRUS

DURING our surveys in and around Bangalore and also at the Experimental Farm of Indian Institute of Horticultural Research, Hessaraghatta, symptoms resembling virus disease were noticed on different species of *Jasminum*. The Plants multiplied through rooted cuttings collected from the infected plants exhibited chlorotic spots, rings, oak leaf pattern and mosaic symptoms Fig. 1). Conspicuous symptoms were noticed on the older leaves. The virus under study closely resembles the yellow ring mosaic of Jasmine reported by Mariappan and Ramanujam[1] in symptomatology and in transmission studies. It also resembles a whitefly transmitted virus disease on *Jasminum sambac* reported by Wilson[2]. The results of the screening of 18 species and 11 varieties of Jasmine grown at the Experimental Farm of Indian Institute of Horticultural Research, Hessaraghatta, are presented herein.

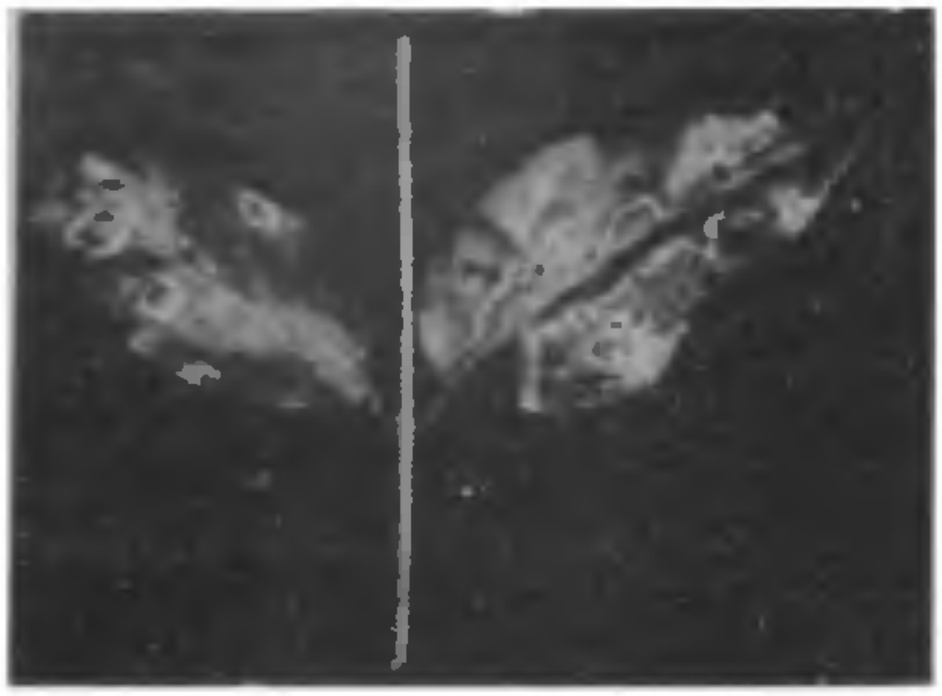

FIG. 1. *Jasminum nitidum* showing chlorofic rings and oak leaf pattern symptoms.

Characteristic symptoms were observed in nine species of *Jasminum*, viz., *J. angustifolium* Vahl., *J. arbaresoens* L., *J. calophyllum* Wall., *J. flexile* Vahl., *J. multiflorum* Andr., *J. nitidum* Skan., *J. rigidum* Zenk., *J. sambac* Ait. and *J. suavissimum* L. The disease incidence in these susceptible varieties ranged from 10 to 100% in the existing populations depending upon the varieties/species. *J. auriculatum* vahl., *J. beesianum* Forest. and Diels., *J. grandiflorum* L., (Pin and Thrum types), *J. humile* L. (Indian and *Wallichianum* types), *J. officinale* L. and *J. paniculatum* L. did not exhibit the symptoms indicating that they possess the factors for resistance to this diesase. Mariappan and Ramanujam[1] screened only 10 species of *Jasminum* and the species which they reported to be resistant, like *J. angustifolium* Vahl., *J. calophyllum* Wall., *J. flexile* Vahl. and *J. rigidum* Zenk were found to be highly susceptible under Bangalore conditions. The natural occurrence of the yellow ring mosaic on some *Jasminum* species and the source of resistance is being reported in the present communication from our country. The sources of resistance for yellow ring mosaic of Jasmine noticed are being utilised for breeding and selecting resistant clones of Jasmine.

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A NEW SPECIES OF *CHARACIUM*—*CHARACIUM INDICUM* PATEL *ET* ISABELLA SP. NOV.

DURING the course of the investigations of fresh water algae in Gujarat, the authors collected one new species of *Characium*, *C. indicum* sp. nov. from Railway sidings at Vallabh Vidyanagar in August, 1965. *Characium indicum* Patel *et* Isabella Sp. nov. (Fig. 1)

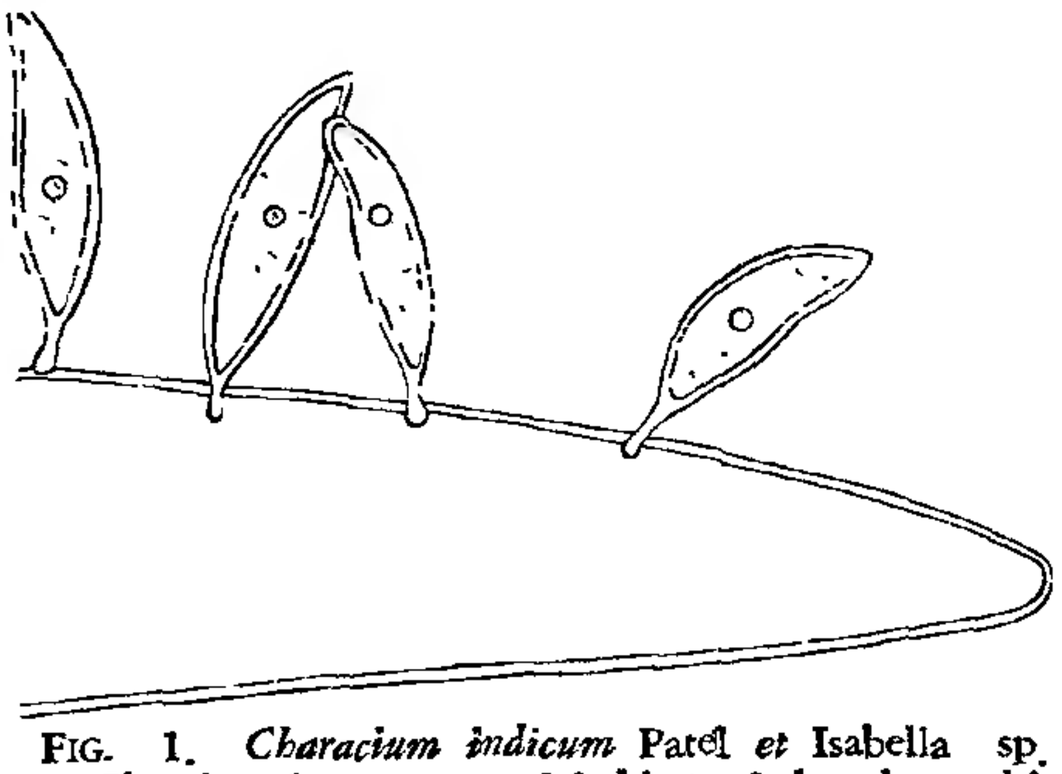

FIG. 1. *Characium indicum* Patel *et* Isabella sp. nov. Showing the nature and habitat of the plant with the host–*Closterium* Sp. (× 1,700).

Cells with a distinct basal stalk, not very long and provided with a small knob-like disc. Cells slightly curved and more or less lanceolate with both sides tapering somewhat gradually. Free end acute or somewhat rounded. Chloroplast single, parietal and with a pyrenoid. Cells 7·1–8·8 μm broad, 27·6–34·7 μm long. Stalk 3·5–4·7 μm long.

Habitat: Growing on *Closterium* in Rly. sidings, Vallabh Vidyanagar, 7–8–1965 (No. 711).

Latin Diagnosis

Characium indicum Patel *et* Isabella Sp. Nov.

Cellulis distinctis stipitibus basalibus longis, habentibus parvis basalibus discis gongylodibus; cellulis plusminusve curvis, lanceolatis dunbus lateribus gradatim contractis. Terminis discretis acutis vel plusminusve rotundis. Chloroplstis singulis, parietalibus, pyrenoidibus. Cellulis 7·1–8·8 μm latis, 27·6–34·7 μm longis; stipitibus 3·5–4·7 μm longis. Habitato: Crescentibus in *Closterium* in via ferres laterali in Vallabh Vidyanagar, 7–8–1965 (No. 711).

The alga under consideration here resembles (1) *Characium acuminatum* A. Braun in having a knob-like basal disc but differs in that the cells are not as symmetrical as in *C. acuminatum*. the stalk is comparatively longer, the beak is not acuminate, the cells are not oblong to ellipsoid and the cells are much smaller, the dimensions of *C. acuminatum* being 15–25 μm broad and 35–50 μm long (See Brunnthaler[1], 1915, 79; Korshikov[2], 1953, 161;