Proceedings of the Indian National Science Academy

Vol. 46, No. 4 
August 1980

CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Authors</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biosciences</td>
<td>Third P M S Blackett Memorial Lecture—Some Hopes and Fears in the Biosciences</td>
<td>Michael Stoker FRS</td>
<td>439</td>
</tr>
<tr>
<td>Molecular Biology</td>
<td>Length of DNA from Bacteriophage T₂ and Its Mode of Packing inside the Phage Head</td>
<td>A N Ghosh and N N Das Gupta FNA</td>
<td>448</td>
</tr>
<tr>
<td>Entomology</td>
<td>Evolution and Systematic Significance of Wing Micro-sculpturing in Termites (Isoptera), IX. Subfamily Termitinae, Family Termitidae</td>
<td>M L Roonwal FNA and S C Verma</td>
<td>455</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>Modulations in Hepatic Nitrogen Metabolism during Short-Term and Prolonged Muscular Stimulation</td>
<td>P Reddanna, C V Narasimha Moorthy, S Krishna Murthy, G Vemananda Reddy and S Govindappa</td>
<td>470</td>
</tr>
<tr>
<td>Palaeontology</td>
<td>On Nuculoma wynnei Cox from the Jurassic of Kutch (Gujarat)</td>
<td>S K Agrawal and R P Kachhara</td>
<td>474</td>
</tr>
<tr>
<td>Fishery Biology</td>
<td>Ovary as an Indicator of Frequency of Spawning in Fishes</td>
<td>P S B R James and Vijaykumar M Baragi</td>
<td>479</td>
</tr>
<tr>
<td>Biochemistry</td>
<td>Biochemical Studies during Seedling Growth of Sweet Pea, Lathyrus odoratus (L).</td>
<td>B S Afria and D Mukherjee</td>
<td>490</td>
</tr>
<tr>
<td>Ecology</td>
<td>Grazing Behaviour of Dry Cows and their Preference of Different Plant Species in a Protected Grassland at Early Fruiting Stage in Chakia Forest, Varanasi</td>
<td>A N Pandey</td>
<td>495</td>
</tr>
</tbody>
</table>

(Continued on inside back cover)
CONTENTS (Continued from outside back cover)

Plant Histochemistry
Enzyme Histochemistry of Gum-resin Canals of Some Members of Burseraceae
J J Shah FNA, S V Subrahmanyam, G M Nair and Kamlesh R Patel 506

Flower Growth & Development
Relationship of Disc Floret Anthesis and Capitular Diameter to Drooping of Ray Florets in the Vase-life of Chrysanthemum
I V Ramanuja Rao, Usha Mehta and H Y Mohan Ram FNA 512

Floral Organogenesis of Martynia diandra (Martyniaceae)
D K Jain, P C Pande and V Singh 518

Radiation Biology
Occurrence and Significance of Polypetalous Variant in Phlox drummondii Hook
C S Pathak and S S Raghuvasansi 524

Limnology
Physico-Chemical Characteristics of Nilnag—A High Altitude Forest Lake in Kashmir—and Its Comparison with the Valley Lakes
V Kaul, J K Handoo and R Raina 528

Microbial Ecology
Chemical and Textural Characteristics of Sediments from Different Depths in a Sub-tropical Pond
L C Mishra 542

Mycorrhizas in the Ferns of North-Eastern India
R R Mishra, G D Sharma and A R Gatphoh 546

Plant Pathology/Microbial Physiology
Epidemiology of Sorghum Downy Mildew. V. Incidence of Systemic Infection
A H Rajasab, M M Shenoj and A Ramalingam 552

Influence of the Herbicide Alachlor on Soil Microorganisms and Carbon dioxide Production
A P Sinha, V P Agnihotri and Kishan Singh 562

Comparative Cellulolytic Ability of Microfungi Inhabiting Various Types of Litter
K R Aneja and R S Mehrotra 566

Plant Embryology
Apomixis in Capillipedium huegelii (Hack.) Stapf (Gramineae)
S P Choda and Ravinder K Bhanwara 572

Weed Biology
Floristic Composition of the Weed Flora, Seasonal Variation and Phenology of Some Weeds of Agriculture Lands in Khasi Hills, Meghalaya
B Neogi and R R Rao 579

Floristics
The Genus Eupatorium Linn. (Asteraceae) in North-East India
R R Rao and M K V Rao 587

Mycology
Studies on Soil Fungi from India
M A Jabbar Miah, J L Varshney and A K Sarbhoy 593