Publication of ‘The Nucleus—Chromosome Reports’

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In order to take care of stray information on chromosome number, karyotype and chromosome behavior that by itself cannot make a full publication but calls for a genuine credit and priority to the primary investigators, the journal *Nucleus* intends to initiate a column ‘The Nucleus—Chromosome Reports’. This shall include an enumerated account of new chromosome number reports, both somatic and gametic number; and also if available a brief account of karyomorphological description by way of karyotype formula, fundamental number, 2C DNA contents and other related information including picture/drawing of chromosome plates. The stray information thus received shall be collated giving due credit to the primary authors. Investigators may send their reports through e-mail to the editorial office of the journal at lavaniauc@yahoo.co.in with a copy to gajrabani@gmail.com providing name of the genus and species suffixed with authority, family, place/site of collection including habitat, voucher specimen reference, and a brief description of the method of study, karyomorphology and chromosome classification according to Levan et al. 1964 [10].

Chromosomes, the bearers of hereditary information that help regulated recombination and gene action are important genetic landmarks for biological organisms. Study of chromosome number, structure and behavior at individual and population level has immensely contributed to our understanding on variation and evolution and as a phylogenetic character, and application of such data in the service of society and environment. Tremendous amount of data has been made available on this, and continue to be generated. Lately, information on 2C value has been accumulated on a large number of taxa [1] adding to a better understanding of chromosomes in evaluation and understanding of gene expression. Availability of chromosome data in the extant and extant species has led to the

inference of whole genome duplication as well as changes in single chromosome number over evolutionary time scale.

So far the principal sources of Chromosome Number Reports in plants have been the Chromosome Atlas of Flowering Plants [3], Chromosome Numbers of Flowering Plants [4], Chromosome Atlas of Flowering Plants of the Indian Subcontinent; volumes 1 and 2 [9], IPCN volumes [5, 6, 8, 14–16], IAPT/IOPB Chromosome Data series [12] which was an extension of longstanding IOPB reports published in *Taxon* since 1964, and compilation of Index to Chromosome Number (IPCN) published by the *Annals of the Missouri Botanical Garden* [7], *Cytotaxonomical Atlas of the Pteridophyta* [11], Chromosome number survey of the ferns and flowering plants of Slovakia [13].

Lately, an exhaustive online resource on Chromosome Counts Database (CCDB) by Rice et al. [17] as a community resource of plant chromosome numbers has been provided that could be utilized multifariously. CCDB includes chromosome data on 8750 genera from 539 families. Individual resource references are duly provided in this database to access the original source.

The founders of the journal *Nucleus* while working in the Department of Botany, Calcutta University (CU) for over five decades steered a group that produced extensive data on chromosomes and genome sizes for Spermatophytes and Archegoniate. With the support of the Department of Biotechnology, Government of India, the Department of Botany, CU initiated the creation of a database, and subsequently involved all other chromosome centres from across India to collate data for India to provide access to such data to all plant scientists. Such Database on genome related information of Indian Plants (dGRIP) is available at the URL mentioned here [2].

It is in this fitness and to cherish the legacy of the founders of the *Nucleus* Professors AK Sharma and A Sharma that the journal is taking this initiative. But all this needs to be continuously strengthened by detailed publications and stray reports. The publication of the latter is planned to be taken care by the journal *Nucleus* through this column.

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We wish to begin this with plants, and look forward for contributions from the prospective investigators. We shall subsequently extend this to animal systems as well.

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