

IN MEMORIUM : PROF. DR. J. C. SEN GUPTA

On Tuesday the 21st January, 1969, Dr. Jatish Chandra Sen Gupta, Professor-Botanist-Administrator, passed away at the age of 69, after a commendable and active life of dedication to Science and Education; the eventful moment came when he was just entering the venue of the Examination hall at 10 A.M., for conducting University examinations at the Botany Department of the University College of Science, Ballygunge, Calcutta, a circumstance which was more pathetic than the event itself.

Dr. Sen Gupta was born on 12th December, 1900, to an illustrious family at Outshahi, Dacca in East Bengal. After a brilliant college career in the Calcutta University, and winning the University gold medal and prizes in M.Sc., he carried out research work on Myxomycetes of India as a Research Scholar under Paul Brühl. In 1926, he proceeded to Heidelberg, Germany, from which University he took his Doctorate Degree for his dissertation on Rheotropic movements in plants, working under the well known and renowned Plant Physiologist, Ludwig Jost. On his return to India in 1929, he was appointed as Professor of Botany in the Presidency College at Calcutta, and in which institution, he was later elevated to higher ranks as Head of the Department of Botany in 1939 and the Principal of the College in 1950, which latter post he held till his retirement on the 30th September, 1955. In amidst his various responsible functions in these capacities, Dr. Sen Gupta kept himself actively engaged in fundamental and applied researches of great significance especially relating to Physiological problems on Jute and various other economic plants and on Vernalisation and Photo-periodism. His work, embodied in more than 50 publications, shows ample evidence of more modern methods of Botanical Researches in these disciplines, with the establishment of a school of his own and a band of research scientists. As a genial Professor, he carried his learning with ease and grace and the students ever found in him their friend and guide.

I must now refer to another great aspect of this Botanist's life, which is very largely reflected in his achievements which are passed on as a permanent legacy to Indian Botany in Systematics, Plant Taxonomy and Floristics—I mean the long awaited re-organisation of the Botanical Survey of India. About this time, India has woke up to a new national life, a new national consciousness having actively sprung up for re-vitalisation of Indian Sciences and more especially the Botanical and allied sciences in the country. No one who has any pretence to a knowledge of Indian Botany and its history and progress will deny that the great strides made in the earlier years had in course of time come to a stage of frustration and inhibition. After successive decades of stagnation, the position was one that during the last half-a-century, it left Indian Systematic Botany like a derelict ship, helpless on the face of the turbulent waters, its earlier progress stunned and disintegrated and its land-marks of progress deeply submerged. The re-organisation of the Botanical Survey of India assumed greatest importance and received proper perspective in these contexts. The Botanical Survey of India was re-organised in March 1954, with the full realisation that Science is an organic growth and that there is an in-

escapable obligation to further the great cause of Plant Taxonomy and Systematics which rested earlier on a well defined fundamental basis in the great Indian Herbarium at the Indian Botanic Gardens at Sibpur, and which had grown through the ages into a stable equipoised structure, to the blessings and protection of which, Indian Botanists pay a great debt of gratitude to the illustrious Western Botanist-Scientists as those of Roxburgh, Wallich, Griffith, King, Prain and a host of others.

To Padma Shri Rev. Fr. Dr. H. Santapau, S. J., goes the credit for being the first Director (Chief Botanist, as then designated) in the new set up of the re-organised Survey, who having initiated successfully the implementation of the re-organisation programmes, handed over charge of the Survey on the 1st October, 1955, to Dr. J. C. Sen Gupta, on Rev. Fr. Santapau's services being requisitioned back by his Missionaries for fulfilment of their own responsibilities. Backed by long years of rich experience in administration and research, Dr. J. C. Sen Gupta was pre-eminently suited for the great task that was before the country, and he threw himself immediately into the work with characteristic zeal and laboured unceasingly to bring results worthy of the choice of his stewardship. He made his way in the Survey by ability and determination and he fully justified the confidence placed in him by those in authority and fulfilled the promises of his years.

The immediate problem before him was to harness the new energy of the youth under his care to ways and purposes that will help the ordered progress of science and progress of the country. In this task, difficulties inspired him with enthusiasm; and in discharging his responsibilities, he was cheered by the hope and buoyed by the faith that all we have willed or hoped or dreamed of good, shall come to exist. Ever since his elevation in public estimation, he has, as the head and leader of the Survey, taken his stand as the most responsible officer and he continued to affect the whole aspect of Botanical exploration, intensive as well as extensive, not only by setting up the four Regional Circles in the four corners of India, in the North, East, South and West, at Dehra Dun, Shillong, Coimbatore and Poona respectively, but also by moulding the mind of the modern systematists to Taxonomical Researches, in the specialised branch of which, his predecessor Rev. Fr. Dr. Santapau, S. J., is the acknowledged authority. So great has been his influence in determining the characters of modern and latest botanical pursuits, field surveys and explorations that for the Botanical Fraternity alone, Dr. Sen Gupta's services have a great mission.

Throughout, his active mind has been surging to push ahead the projects and programmes of his creative faculties in amidst great opposing factors. To him goes the credit of deeply implanting the Survey when it was almost facing signs of annihilation, immediately on its revival, by extraneous factors, vehemently putting forth claims for amalgamation of the new born Survey with other already existing counter-parts, and disapproving of its independent existence. To him goes the credit for reprinting of out of print Regional Floras as those of Cooke's Flora of Bombay Presidency, Gamble's Flora of Madras Presidency, Prain's Bengal Plants, Duthie's Flora of Upper Gangetic Plains, Haines' Botany of Bihar and Orissa etc., thus making available these indispensable and basic literature for wider circles of research workers, whose work, prior to this effort, were either hampered or much restricted due to lack of these reference and guide literature. To him again goes

the credit of transfer of various Herbaria of State Governments to Botanical Survey of India, as those of the Forest Department Herbarium, Assam; Herbarium of the Economic Botanist, Poona; Agricultural College and Research Institute Herbarium, Coimbatore, and finalisation of the transfer of the famous Herbarium at the Indian Botanic Gardens, Sibpur, to constitute the Central National Herbarium, all of which determined efforts have helped considerably to consolidate the position of the Botanical Survey as the acknowledged authoritative centre for critical Taxonomical and Floristic researches in the country. To him further goes the credit for setting up Orchidaria on a National basis in Eastern Circle at Shillong, and in the Southern Circle at Yercaud Hills, and acquisition of extensive lands for experimental gardens or for building purposes as in the instance of transfer of 2 acres of land attached to Agricultural College and Research Institute, Coimbatore to the Southern Circle by the Madras Government, 3 acres of land in Indian Botanic Garden for the construction of the Central National Herbarium Buildings, 4 acres of land for Eastern Circle at Woodlands for the Circle and its National Orchidarium, 6 bighas of land near Indian Botanic Garden for staff-quarters, 45 acres of land in Mundhawa near Poona from the Government of Maharashtra to Western Circle and pushing through schemes for acquisition of suitable lands for experimental Gardens at Sambalpur in Orissa, in West Bengal, at Dehra Dun and nearer Himalayan regions etc., under the Five-Year Plan projects.

Among the other achievements of Dr. Sen Gupta are to be mentioned, setting up of a Central Botanical Laboratory on a rational basis, organising Ecological, Chemical; Pharmacognostic and Economic sections with possibilities for conducting original researches on an extended scale, starting a new journal, the Bulletin of the Botanical Survey of India, reviving the older publications as the Records and Reports of the Botanical Survey, organising a Printing and Publication Section to look to the interest of publication activities, initiating compilation of the Dictionary of Flowering Plants of India, starting nomenclatural cards for Indian Taxa, setting out various expeditions to Himalayan High Ranges and to Andaman and Nicobar Islands, Laccadives Islands etc., in addition to the rigorous periodical explorations arranged in the explored, under-explored and un-explored regions of India, providing facilities for foreign training of officers of the Survey under Cultural Exchange and Colombo Plans, procuring of Wallichian collections from the Swiss Government, introducing research scholarships for young botanists in the Survey, organising new circles, publishing catalogues of Libraries, establishing close cultural contacts with foreign counterparts all over the world, and above all absorbing the staff of the erstwhile State Governments in the cadre of the Survey, with the transfer of the respective State Herbaria to the Botanical Survey of India. Considering the moribund state of the Botanical Survey of India before re-organisation, and the impact of his personal efforts on the various lines indicated above, surely one cannot but admire the dynamic state to which the Survey has now been ushered into, and un-hesitatingly admit that all the undertakings carried out by Dr. Sen Gupta were of the greatest value. After his retirement from the Survey on 12.6.1961, he again took active service as President (Administrator) of the Board of Secondary Education, West Bengal and continued his interest in scientific researches and problems that were engaging the scientist's attention.

Among the scientific progress, he emphasised the spirit of co-operation for public good, to which all individual or sectional interests should be sub-ordinated. His respect for the Government rules and administration bordered on admiration; but he was also ready to criticise it when it merited criticisms. He always regarded that to keep pure and uncorrupted the high ideal for the noble scientific profession is our bounden duty. He did his duty in the best possible way with all that he could command, steadily, silently, unobtrusively and unostentatiously; and deep down in the heart of his, there existed always a great duty of justice and charity. All the Directors of the Survey were famous, and Dr. Sen Gupta was no exception. Dr. Sen Gupta's internal administration appears to have been a blessing to his subordinates.

Human heartedness was the background of this botanist's strength. And how much imbued with the spirit of humanity Dr. Sen Gupta was will be mirrored in the lines

"Seek love in the pity of other's woe
In the gentle relief of another's care".

We will then realise that in him we had a botanist of supreme humanity.

Recalling the great attributes of Dr. Sen Gupta, we cannot but in appreciative terms jot down such qualities as the welfare of his establishment, application to duty, determination to advance science, zeal for expeditions enduring considerable hardships, quality of undeviating thoroughness and unsparing devotion to duty, ungrudging help, however busy he may be, organising capacity, untiring energy, unfailing kindness, natural gaiety of spirits and most of all, his lovable character. Noted for sobriety and judgment, he had the skill to lead. By these he won the affection of all with whom he came into contact.

Service to Associations was his ardent desire. He was the President of the Botanical Society of Bengal; Botany Section of the Indian Science Congress, Baroda in 1955; Member, Board of Trustees, Indian Museum; Member, Tea Research Committee of the Tea Board; Member, Medicinal Plants Committee; Wild Life Committee, Provincial Agricultural Committee, West Bengal, and various other Committees under the C.S.I.R.; President, Ecological Society of India, Biological Secretary, Asiatic Society of Bengal, and Fellow of the Botanical Society, India. He was also the recipient of Paul Brühl's Gold Medal awarded by the Asiatic Society of Bengal.

Next to Science, Foot-ball and Cricket were his affection. When witnessing any interesting game at Foot-ball or Cricket, it is not uncommon a feature to find Dr. Sen Gupta transposing himself in great raptures from the state of a spectator to one of an active contestant, manifesting his greatest delights in the fineness of the game or in the successful combating of a critical situation, to the admiration of his neighbours at his naive ecstasies.

Dr. Sen Gupta had neither prejudices nor undue preferences. He took special delight in South Indian dishes; being not content with relishing the fineness of their palatability, his imaginative mind will ever probe into the problems of their processing and preparations, with an ardent intent to put to practice in his home itself; and I can vouch with confidence, having had the rare privileges of Dr. Sen Gupta's and Mrs. Sen Gupta's hospitalities which always bordered on "embarrassments" that the couples possessed

remarkable capacities to accomplish what they contemplated, to prepare some of the South Indian delicacies, absolutely true to the indigenous preparations.

Dr. Sen Gupta was blessed with a happy home. Mrs. Nilima Sen Gupta, true to the tradition of the lives of noble Indian Woman-hood, had in her the realisation that life's purpose was true service to her husband, and she resolved herself to render useful and to make all those around her happy. Dr. Sen Gupta, by nature possessed in him child-like simplicity and innocence, while his wife ever displayed meekness and submission to everything except sin. While patient fortitude manifested in the man, holy confidence and virtues counter balanced in her, bringing thus a wonderful harmony of life, which gives a very high and abiding place in the Hindu Family Life of all times. Their only daughter Mrs. Jasadhara Bagchi, nurtured with all care in her parents' home during her maidenhood, added more joy to the illustrious family with the stamp of exquisite qualities and she built her faith on her father.

On the morning of the eventful day, Dr. Sen Gupta, hale and healthy as he was then, was going through all his routine with an interest, more than usual, relishing the choicest dishes of his food and selecting the best of his garments that pleased him most, and with his wont gait and happy smiles, took leave of his family to go on his mission to the examination centre, leaving behind conciliatory message that he might reach back home late in the evening in the event of his having to value the papers of the examinees. No one can predict what the order of Nature would be. Events occur that have apparently not a shadow of indication for their occurrence. The innocent souls of his family had not then known how bitter life could turn itself to be. Hardly had Dr. Sen Gupta reached the portals of the Examination hall, the end came, too sudden to be believed, bringing in weight of sorrow in the hearts of thousands who came under his influence and flood of grief in the hearts of his endeared family, smarting with pain, shocked and stunned to find that their most cherished one, who ever smiled his blessings on their glorious happy life, is never more to be with them. He is survived by his wife, daughter, son-in-law and a grand-daughter.

These are the things that I know about him. But as to what his loss means to all, I can only guess, and seek reconciliation in the realisation, hard though that may be, that

"God's children we

And in His Grace will He His Children tend".

Dr. Sen Gupta was a delightful companion, a cordial host and a true friend. His great, useful and inestimable services earned for him the reputation as a great Educationist; and his memory will always be fresh and fragrant in the Survey and the Botanical Circles. His name and good services will always be a source of hope, strength and inspiration to all who are engaged in the noble service of the country's advance in science and knowledge. His qualities stand sharply in my memory to day, making me regret very much that, busy though he invariably was, I did not make greater efforts to see more and more of him than I did. May he shed light and love on all.

Botanical Survey of India
14 Madan Street, Calcutta.
14th April, 1969

K. S. SRINIVASAN
Deputy Director