

Exotic medicinal plants-current status and future priorities

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SUMMARY

Augmentation of new genetic resources either through indigenous collections or by importing from other countries is an important activity of any crop improvement programme. Indian history had witnessed the invasion of many world communities like British, French, Portuguese, Dutch, Arabians, Muslims etc with whom a diverse genetic base of many crop plants were also introduced in the country's flora. Many of these species have been adapted well and naturalized in Indian climate and are being used in various facets of life. The pharmaceutical industry is also backed by many such plants. Of the forty major commercial medicinal plants utilized by the Indian pharmaceutical companies, about 27 per cent have originated in other countries. The percentage is still higher in case of commercial aromatic plants viz., 52 per cent of the total aromatic component. The gradual increase in the utilization of exotic plants by the pharma-aroma-companies is because many plants have been introduced into cultivation and are now a part of regular agriculture system. The National Bureau of Plant Genetic Resources (NBPGR), New Delhi under ICAR is instrumental in providing this genetic variability of medicinal plants at both fronts. The import of plant genetic resources into India is governed by Plant Quarantine (Regulation of Import Into India) Order, 2003. Access to genetic resources of Indian origin by foreign nationals is governed by Biological Diversity Act, 2002 of Government of India based on the principle of 'Sovereign rights of Nations' as promulgated under the legally binding Convention on Biological Diversity (CBD), 1992. The Convention provides for appropriate access to genetic resources and transfer of relevant technologies on mutually agreed terms, subject to prior informed consent.

Key Words : Access, BDA, Import, Medicinal plants, NBPGR

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Indian system of medicine uses about 95 per cent of its formulations from plant origin. Presently more than 250 species of medicinal plants are being grown commercially. Medicinal plants are valuable source of drugs and pharmaceuticals, favours and fragrances and other industrial products. 80 per cent of the world populations still rely on plant based raw materials for primary health care and more than 20,000 species of medicinal and aromatic plants are being used. Unique diversity in medicinal plants is seen in India

matching the diverse agro-ecological zones/conditions found in the Indian sub-continent. As per the WHO, 80 per cent of the rural population depends on herbal drugs globally for primary health care. Medicinal plants are the basis for classical system of medicine viz., Ayurveda, Sidha and Unani. Introduction /Import of genetic resources of medicinal plants in India started as early as 1940 by the erstwhile Division of Plant Introduction in IARI, New Delhi. The division was later upgraded to full fledged Institute named National Bureau of Plant Introduction in 1976 and renamed as National Bureau of Plant Genetic Resources in 1977. NBPGR operates under ICAR system controlled by the Department of Agricultural Research and Education (DARE) of the Government of India. NBPGR is now playing a very dynamic and key role in overall regulation and management of plant genetic resources (PGR) in India. NBPGR is augmenting the large amount of variability for broadening the genetic base by importing genetic wealth of different crop plants from different ecological areas of the world. These materials have been used all over the country

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