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INTRODUCTION OF POTENTIAL CROPS TO ENRICH INDIAN BIODIVERSITY

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Potential crops provide excellent opportunity for crop diversification by virtue of their nutritional importance and wide adaptability. Species that occur as life support in extreme environmental conditions having tolerant genetic makeup to survive under such adverse situations. Major potential crops like pseudocereals (grain amaranth, buckwheat, chenopodium, job's tear), food legumes (rice bean, adzuki bean, winged bean), oilseeds (perilla, paradise tree), vegetables (kankoda, salt bush, kalingda), fodder crops (fodder tree species) and industrial plants (jojoba, guayule, jatropha, tumba). Bioversity International is making big steps with its research on neglected and underutilized species, developing a holistic approach to strengthen the resilience of agricultural livelihoods. Introduction is an effective mean to overcome the narrow genetic diversity and introduction of useful germplasm from exotic sources has been one of the major activities of ICAR-National Bureau of Plant Genetic Resources (NBPGR), New Delhi. Director, NBPGR has been authorized to issue import permit and receive imported materials from custom authorities for its quarantine inspection and these germplasm accessions were utilized in various crop improvement and breeding programs. Besides, NBPGR is the nodal agency for facilitating import for research purposes too. From 1976-2016, a total of 3325 accessions in potential crops were introduced through NBPGR into our country viz., amaranth (1108), buckwheat (185), chenopodium (235), job's tear (19), rice bean (232), adzuki bean (286), winged bean (324), perilla (56), paradise tree (5), kankoda (1), salt bush (353), jojoba (215), guayule (164), jatropha (267), tumba (42). To address the challenges of increasing productivity and climate resilient adaptability of our country, there is an urgent need to introduce more varieties/hybrids/germplasm with superior quality traits.