**Wild Genepool of Pearl Millet at ICRISAT Genebank**

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- Pearl millet (*Pennisetum glaucum* (L.) R. Br.) is an important food and forage crop in Africa and Asia, and important forage in the Americas
- It has great potential because of its suitability to the extreme limits of agriculture
- Defused belt stretching from Senegal to Western Sudan is the center of origin of pearl millet

**Further Reading**


- ICRISAT genebank at Patancheru, India conserves 22,211 germplasm accessions including 750 accessions of 24 wild species of *Pennisetum*, from 51 countries
- Of over 140 species of *Pennisetum*, only 24 are conserved at the ICRISAT genebank
- Small seed samples of wild accessions are available for research use under the Standard Material Transfer Agreement (SMTA) from the ICRISAT genebank

**Species name** | **Plant** | **No. of accesses** | **Genepool and ploidy** | **Traits of importance** | **Life cycle and reproduction**
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*P. monolchum* (Maire) Brunken (*P. violaceum*) | 335 | Primary genepool, 2n=2x=14 | Progenitor, source for new cytoplasm and fodder | Annual, Sexual | 2n=6x=54

*P. miliaceum* Hochst. | 48 | Primary genepool, 2n=2x=14 | Fodder | Annual, Sexual | 2n=2x=14

*P. schweinfurthii* Pilg. | 5 | Secondary genepool, 2n=2x=14 | Source for large seeds and fodder | Annual, Sexual | 2n=4x=36

*P. purpureum* Schum. (Napier elephant grass) | 35 | Secondary genepool, 2n=4x=28 | Good source for cut and carry green fodder. Used as living fence, thatching, hay and silage, and in paper making | Perennial, Vegetative/Sexual | 2n=2x=14

*P. alpestris* L. (L.) Spreng. (Swamp foxtail) | 1 | Tertiary genepool, 2n=2x=18 | Ornamental | Annual, Sexual | 2n=2x=14

*P. sorghoides* Steud. | 1 | Tertiary genepool, 2n=2x=18 | Fodder | Annual, Sexual | 2n=2x=14

*P. pardinatum* Trin. (Dinanath grass) | 134 | Tertiary genepool, 2n=4x=36 | Drought mildew resistance. Used as good green fodder, used for thatching and making mats | Annual, Sexual | 2n=2x=14

*P. patens* Schult. (Mission grass) | 88 | Tertiary genepool, 2n=6x=54 | Drought mildew and rust resistance, good fodder, hay for horses | Annual/Perennial, Sexual/Apomixis | 2n=2x=14

*P. lanatum* Leek. | 1 | Tertiary genepool, 2n=2x=18 | Forage | Perennial, Apomixis | 2n=2x=10

*P. miliaceum* (Hochst.) Schweinf. | 6 | Tertiary genepool, 2n=2x=14 | Used as forage before flowering | Bimodal, Sexual/Apomixis | 2n=2x=14

*P. ciliare* L. Mant. (Buffel grass) | 5 | Tertiary genepool, 2n=4x=36 | Fodder | Perennial, Sexual | 2n=2x=14

*P. clandestinum* (Brongn.) Trin. | 11 | Tertiary genepool, 2n=4x=36 | Permanent pasture, hay and silage, drought tolerance | Perennial, Sexual/Apomixis | 2n=2x=14

*P. ciliaris* Hochst. | 1 | Tertiary genepool, 2n=4x=36 | Pasture grass, soil binder | Perennial, Vegetative/Sexual | 2n=2x=14

*P. ocellatum* (Forsk.) Ex. Gmel. | 7 | Tertiary genepool, 2n=4x=36 | Fodder | Perennial, Sexual | 2n=2x=14

*P. dichotomum* Hochst. Ex Chiov. (Kikuyu grass) | 1 | Tertiary genepool, 2n=4x=36 | Ornamental/Apomixis, fodder | Perennial, Sexual/Apomixis | 2n=2x=14

*P. fistulosum* Griseb. | 6 | Tertiary genepool, 2n=4x=36 | Ornamental, fodder | Perennial, Sexual/Apomixis | 2n=2x=14

*P. hohenackeri* Hochst. Ex Steud. (Moya grass) | 8 | Tertiary genepool, 2n=2x=18 | Used for thatching, rope and paper making | Perennial, Sexual/Apomixis | 2n=2x=14

*P. violaceum* (Maire) Brunken (P. violaceum) | 1 | Tertiary genepool, 2n=2x=18 | Forage | Perennial, Apomixis | 2n=2x=14

*P. schweinfurthii* (Brongn.) Trin. | 1 | Tertiary genepool, 2n=7x=63 | Ornamental | Perennial, Sexual | 2n=2x=14

*P. macraei* Trin. (Needle grass) | 4 | Tertiary genepool, 2n=4x=32 | Source for drought tolerance | Perennial, Sexual/Apomixis | 2n=2x=14

*P. orientale* L.C. Rich. | 33 | Tertiary genepool, 2n=4x=36 | Drought tolerance, good soil binder and forage grass | Perennial, Sexual/Apomixis | 2n=2x=14

*P. setaceum* (Forsk.) Chiov. (Fountain grass) | 11 | Tertiary genepool, 2n=3x=27, 2n=6x=54 | Ornamental, used as hedges | Perennial, Sexual/Apomixis | 2n=2x=14

*P. squamatum* Fresen. | 2 | Tertiary genepool, 2n=6x=54 | Source for winter hardiness, green fodder | Perennial, Apomixis | 2n=2x=14

*P. thumbergii* Kunth. | 4 | Tertiary genepool, 2n=2x=18 | Ornamental | Perennial, Sexual | 2n=2x=14

*P. utilisum* Fresen. (Feather top) | 2 | Tertiary genepool, 2n=5x=45 | Ornamental | Perennial, Sexual/Apomixis/vegetative | 2n=2x=14

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