

стран, ежегодно коллекция пополняется в среднем на 1830 образцов. В настоящее время систематизированы данные по исследованиям и сборам определенных групп культур на территории бывшего СССР экспедициями ВИР в 2000-е годы; определены территории для поиска и сбора ценных генотипов. Созданы электронные карты маршрутов экспедиций ВИР за период 2000-2010гг. Важным инструментом, позволяющим оптимизировать работу по мобилизации генетических ресурсов растений в коллекцию, является электронный атлас ареалов культурных растений и их диких родичей.

GLOBAL WHEAT PRODUCTION OUTLOOK AND UTILIZATION OF GENETIC RESOURCES

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The global population growth requires constant increase in wheat productivity to satisfy the needs. If during and after Green Revolution annual wheat genetic gains exceeded 2.5%, they slowed down in 2000 to below 1%. In order to satisfy the growing needs wheat productivity gain shall be within 1-1.5% in the future. Agronomy contribution to productivity gains is very important but new varieties also represent potential for keeping grain yield increases in the future. Unfortunately, the environmental conditions associated with the climate change result in abiotic and biotic stresses which limit wheat grain yield in many regions of the world. Traditional breeding is only able to maintain wheat grain yields from declining by maintaining the disease resistance and yield level. New modern approaches like utilization of molecular markers, genomic selection, double haploids, high throughput phenotyping, hybrids, etc will assist in accelerating the genetic gains. The role of wheat genetic resources is very important in combatting the consequences of the climate change. Free exchange of the modern highly productive germplasm is essential for wheat breeding programs all over the world to benefit through utilization of new traits, genes and gene combinations. Wheat landraces have been successfully used recently to enhance micronutrients content in grain. Synthetic hexaploid wheat which originated from crosses between durum wheat and *Aegilops tauschii* represents an important source of useful traits associated with drought and heat tolerance as well as yield potential. Modern methodologies of wheat genetic resources utilization are discussed.