

Pakistan Agricultural Research Council National Agricultural Research Centre Plant Genetic Resources Institute Islamabad- 45500, Pakistan

Message to Plant Genetic Resources (PGR) Stakeholders

Food security is a local, provincial, national, regional as well as the global agenda that can only be made possible through a concerted approach of food production and access, involving several stakeholders. Plant genetic resources (PGR) are essential ingredients which are available to breeders for their work on crop improvement in order to evolve new varieties, which in turn is so essential in addressing food security in the backdrop of ever emerging biotic and biotic stresses as well as demand for quality and yield improvement.

Since most countries rely on a large extent on crops originating outside their territories, thus need to access such diversity from their national genebanks or those in other countries. Germplasm exchange at national and international levels are crucial in world hunger reduction. If a strict restriction is imposed on PGR exchange, countries with narrow genetic base will surrender to epidemics and their national food security is likely to become fragile.

The International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) entered into force in 2004, and is an important instrument by which plant breeders can access crop genetic diversity on the basis of multilateral "facilitated access". It empowers the PGR stakeholders through signing a Standard Material Transfer Agreement (SMTA) ownership right and it also paves the way for sharing any benefit arising from commercial utilization of the material provided. The SMTA also help keep track of the PGR utilization.

Pakistan is the signatory to the "ITPGRFA" and other treaties including CBD (Convention on Biological Diversity) that makes obligatory for the member countries to implement it in true spirit in the National Agricultural Research System (NARS) both in public and private sectors.

Ensuring the availability of PGRs provides vital support to the national crop improvement programs in the form of required germplasm seeds from the National Genebank of Pakistan (NGP); that act as a trustee of genetic resources of cultivated plants, their wild relatives and other orthodox plants. These PGRs are collected from various agroecological regions of the country or acquired from abroad. These collections are conserved in NGP for evaluation and distribution to stakeholders. While providing PGR for R&D we encourage our germplasm user to deposit back (partial amount) seeds multiplied by them; in the Genebank. Further the evaluation data sharing on the performance of the material will add data to better serve our stakeholders with specific traits demand.

The PGR regeneration/multiplication is a tedious task, especially while the NGP holds few grams of seeds in stocks for distribution due to the space limitation. Therefore, we request our valued stakeholders to be precise and rationalized in their demands to safeguard this resource for future R&D.

Lastly, we request the PGR holders to deposit the valuable PGRs with them in the NGP for national cause as well as safety duplicate that can be reclaimed/repatriated in any event leading to eventual loss of PGR by/from the depositing stakeholder.

The NGP mission is to serve its stakeholders better and hold a long-lasting collaborative partnership with them.

Director

Note: Always download new form (Seed Request & SMTA) from website for ordering http://www.parc.gov.pk/index.php/en/component/content/article/170-announcements-2018/1474-download-forms

Contact: <u>http://ngp.parc.gov.pk/gringlobal/search</u> +92-51-9073-3701; 3731; 3733; +92-51-9255203



<u>National Genebank of Pakistan</u> PAKISTAN AGRICULTURAL RESEARCH COUNCIL NATIONAL AGRICULTURAL RESEARCH CENTRE PLANT GENETIC RESOURCES INSTITUTE Islamabad- 45500, Pakistan

Dated:

Director,

Germplasm (Seed) Request Form

Requester's detail (Student not allowed; research supervisor to fill-in & Sign)

Name	Institute/ University
Designation	Official Postal
Email	Address
Cell #	& Code

Other details

Title of Research /Project/ Dissertation	
Genus Species only (no common name)	
Number of accessions required	
No. seed required /accession	
Nature of Experiment:	Lab (Y / N) / field (Y / N);Expected start date
Location of experiment	
Multiplied Genebank Material	Will be partly deposited / returned to Genebank (Yes / No)
Student's Name (if engaged)	(Ph.D., M. Phil., M.Sc., B.Sc.)
Students cell # & email	

Declaration by Requester

I do solemnly agree that I will acknowledge PGRI/Genebank (NGP) as the source of seed material and will mention the same accession numbers in all reports and publications. I shall also provide feedback (feedback form, reports, information & submit publications & thesis copy) on PGR performance after its evaluation. I will comply with the Treaty "ITPGRFA" & SMTA. I will not channelize this material abroad by any means or any private seed sector.

Requester's Name & Signature (Official stamp)

Note: 1) Updated Seed Request form & SMTA is available at:

http://www.parc.gov.pk/index.php/en/component/content/article/170-announcements-2018/1474-download-forms; 2) A maximum of 25 seeds per accession are supplied; 3) Seeds may be population samples; 4) Request can be submitted only by an authorized scientist/ researcher/ supervisor/ PI/ PD/ Chairman/ Head of Department/ Director and not by student; 5) Use separate form for each crop; 6) Seeds are sent through Pakistan Post free or TCS at cost payable by requester as COD; 7) Submit this form along with the SMTA form duly filled and signed on pages 2 & 7. 8) We encourage our germplasm user to deposit in the Genebank, partial amount of the seed multiplied by you; 9) As you are important stakeholder of PGR utilization; we request you to deposit your valuable collection in the National Genebank in the national interest and long-term safety of your material.

For Genebank Use

Request #	Date	
SMTA status	Feedback	
Comments	Query to requester	
Availability checked	Packed/Labeled	

Curator Genebank

Contact: <u>http://ngp.parc.gov.pk/gringlobal/search</u> +92-51-9073-3701; 3731; 3733; +92-51-9255203

Plant Genetic Resources Institute (PGRI), National Agricultural Research Centre (NARC), Islamabad <u>Feedback Form</u>

Plant Germplasm Feedback Record #:_____

Dated _____

Crop _____

Recipient _____

S.#	Activity Record	Detail	Remarks
1	No. of Accessions Provided		
2	Date of Dispatching / Receiving	/	
3	Planting Location		
4	Date of Sowing & Transplanting (if applicable)	/	
5	Germination % Accessions wise* (report not germinating accessions ASAP)		
6	Date(s) of Harvesting(s)		
7	Parameters of Data recorded* Morphological qualitative (flower color etc.) & quantitative (Plant height etc.); Bio-chemical (SDS- PAGE etc.); Molecular (DNA-RADP etc.); Biotic stress (Disease scoring); Abiotic stress (Stress tolerance) etc.		
8	Accession-wise Significant achievement/ performance*		
9	Training/ Thesis/ HRD utilizing the Accessions provided		
10	Publication produced by using the Accessions		
11	Promising Elite line/ Variety Identified/ Selected from Accessions provided		
12	Accessions wise seed provided back to NGP, PGRI, NARC after multiplication		
13	Future Plan for Accessions/Lines Identified/ Developed		
14	Any other note		

* Use separate/additional sheet(s) where necessary



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Plant Genetic Resources Institute National Agricultural Research Centre Park Road, Islamabad – 45500 PAKISTAN

Islamabad the

National Genebank of Pakistan

STANDARD MATERIAL TRANSFER AGREEMENT (SMTA)

PREAMBLE

WHEREAS

The International Treaty on Plant Genetic Resources for Food and Agriculture (hereinafter referred to as "the **Treaty**")¹ was adopted by the Thirty-first session of the FAO Conference on 3 November 2001 and entered into force on 29 June 2004;

The objectives of the **Treaty** are the conservation and sustainable use of **Plant Genetic Resources for Food and Agriculture** and the fair and equitable sharing of the benefits arising out of their use, in harmony with the Convention on Biological Diversity, for sustainable agriculture and food security;

The Contracting Parties to the **Treaty**, in the exercise of their sovereign rights over their **Plant Genetic Resources for Food and Agriculture**, have established a **Multilateral System** both to facilitate access to **Plant Genetic Resources for Food and Agriculture** and to share, in a fair and equitable way, the benefits arising from the utilization of these resources, on a complementary and mutually reinforcing basis;

Articles 4, 11, 12.4 and 12.5 of the Treaty are borne in mind;

The diversity of the legal systems of the Contracting Parties with respect to their national procedural rules governing access to courts and to arbitration, and the obligations arising from international and regional conventions applicable to these procedural rules, are recognized;

Article 12.4 of the **Treaty** provides that facilitated access under the **Multilateral System** shall be provided pursuant to a **Standard Material Transfer Agreement**, and the Governing Body of the **Treaty**, in its Resolution 1/2006 of 16 June 2006, adopted the Standard Material Transfer Agreement.

ARTICLE 1 — PARTIES TO THE AGREEMENT

1.1 The present Material Transfer Agreement (hereinafter referred to as "this Agreement") is the Standard Material Transfer Agreement referred to in Article 12.4 of the Treaty.

1 Note by the Secretariat: as suggested by the Legal Working Group during the Contact Group for the Drafting of the Standard Material Transfer Agreement, defined terms have, for clarity, been put in bold throughout.

1.2 This Agreement is:

BETWEEN: (Director, PGRI, NARC, Islamabad, Pakistan*) (hereinafter referred to as "the Provider"),

AND: (

name and address of the recipient or recipient institution, name of authorized official, contact information for authorized official*) (hereinafter referred to as "the **Recipient**").

1.3 The parties to this Agreement hereby agree as follows:

ARTICLE 2 — DEFINITIONS

In this Agreement the expressions set out below shall have the following meaning:

"Available without restriction": a **Product** is considered to be available without restriction to others for further research and breeding when it is available for research and breeding without any legal or contractual obligations, or technological restrictions, that would preclude using it in the manner specified in the **Treaty**.

"Genetic material" means any material of plant origin, including reproductive and vegetative propagating material, containing functional units of heredity.

"Governing Body" means the Governing Body of the Treaty.

"Multilateral System" means the Multilateral System established under Article 10.2 of the Treaty.

"Plant Genetic Resources for Food and Agriculture" means any genetic material of plant origin of actual or potential value for food and agriculture.

"Plant Genetic Resources for Food and Agriculture under Development" means material derived from the Material, and hence distinct from it, that is not yet ready for commercialization and which the developer intends to further develop or to transfer to another person or entity for further development. The period of development for the Plant Genetic Resources for Food and Agriculture under Development shall be deemed to have ceased when those resources are commercialized as a Product.

"**Product**" means **Plant Genetic Resources for Food and Agriculture** that incorporate2 the Material or any of its genetic parts or components that are ready for **commercialization**, excluding commodities and other products used for food, feed and processing.

"Sales" means the gross income resulting from the commercialization of a **Product** or **Products**, by the **Recipient**, its affiliates, contractors, licensees and lessees.

* Insert as necessary. Not applicable for shrink-wrap and click-wrap Standard Material Transfer Agreements.

A "shrink-wrap" Standard Material Transfer Agreement is where a copy of the Standard Material Transfer Agreement is included in the packaging of the Material, and the Recipient's acceptance of the Material constitutes acceptance of the terms and conditions of the Standard Material Transfer Agreement.

A "click-wrap" Standard Material Transfer Agreement is where the agreement is concluded on the internet and the Recipient accepts the terms and conditions of the Standard Material Transfer Agreement by clicking on the appropriate icon on the website or in the electronic version of the Standard Material Transfer Agreement, as appropriate.

2 As evidenced, for example, by pedigree or notation of gene insertion.

ARTICLE 9 — ADDITIONAL ITEMS

<u>Warranty</u>

9.1 The **Provider** makes no warranties as to the safety of or title to the **Material**, nor as to the accuracy or correctness of any passport or other data provided with the **Material**. Neither does it make any warranties as to the quality, viability, or purity (genetic or mechanical) of the **Material** being furnished. The phytosanitary condition of the **Material** is warranted only as described in any attached phytosanitary certificate. The **Recipient** assumes full responsibility for complying with the recipient nation's quarantine and biosafety regulations and rules as to import or release of **genetic material**.

Duration of Agreement

9.2 This Agreement shall remain in force so long as the Treaty remains in force.

ARTICLE 10 — SIGNATURE/ACCEPTANCE

The **Provider** and the **Recipient** may choose the method of acceptance unless either party requires **this Agreement** to be signed.

Option 1 – Signature*

I, ______Director, PGRI (Full Name of Authorized Official), represent and warrant that I have the authority to execute **this Agreement** on behalf of the **Provider** and acknowledge my institution's responsibility and obligation to abide by the provisions of this Agreement, both by letter and in principle, in order to promote the conservation and sustainable use of **Plant Genetic Resources for Food and Agriculture**.

Signature..... Date.....

Name of the Provider Director, PGRI, NARC, Islamabad, Pakistan

Signature.....

Name of the **Recipient**

(Official Stamp)

Option 2 – Shrink-wrap Standard Material Transfer Agreements*

The **Material** is provided conditional on acceptance of the terms of **this Agreement**. The provision of the **Material** by the **Provider** and the **Recipient's** acceptance and use of the **Material** constitutes acceptance of the terms of **this Agreement**.

Option 3 – Click-wrap Standard Material Transfer Agreement*

□ I hereby agree to the above conditions.