

Department of Science and Technology
PHILIPPINE TEXTILE RESEARCH INSTITUTE

MAJOR PROGRAMS AND PROJECTS FOR CY 2021
under the Rapid, Inclusive and Sustained Economic Growth

Program/Project Title	Objective	Beneficiaries	Project Duration	Project Cost (₱ '000)	Source of Fund	Status
GREEN COLORANTS, MATERIALS AND PROCESSING TECHNOLOGIES R&D PROGRAM						
Enhanced Spinning Process for Natural Textile Fiber-Based Yarns	This study focus on the development of natural textile fiber-based yarns using compact spinning technology derived from the two existing spinning system, the cotton system and semi-worsted spinning system	Pineapple leaf suppliers, weaving and dyeing/finishing mills	Jan 2021 - Dec 2021	1,920	GAA	new
Finishing Technologies for Philippine Natural Fiber-Blended Yarns and Fabrics	This project aims to explore the performance of PTRI developed yarns in the yarn finishing specifically on the gas singeing, mercerization and combination	MSMEs involved in spinning, handloom weaving, dyeing, trading industries and other garment manufacturers who are engaged in the utilization of indigenous materials	Jan 2021 - Dec 2021	2,308	GAA	new
Pilot Scale Verification of the Enhanced Bio-Chemical Pretreatment of Natural Textile Fibers	This project aims to verify on a pilot scale level the enhanced bio-chemical pretreatment for pineapple leaf and BANDALA fibers	Pineapple leaf and BANDALA fibers processors/suppliers	Jan 2021 - Dec 2021	2,701	GAA	ongoing
Improved Fabric Pilling Resistance using the Ultraviolet (UV)-Enzyme Finishing Treatment of the Natural Textile Fiber	This study will explore the combination of UV irradiation and enzyme treatment to evaluate the pilling performance of cotton blended fabrics.	Textile manufacturers, garment producers and converters	Jan 2021 - Dec 2021	1,427	GAA	new
Pilot Scale Verification of Silk Wastes/Cellulosic Fiber Blended Yarns	This project aims to verify in the pilot-scale the textile processing performance of spun silk blended yarns. It will establish its economic viability specifically for textile material production	Designers, sericulture farmers, pineapple leaf fiber processors	Jan 2021 - Dec 2021	2,000	GAA	new
Field Verification of New PTRI Bombyx mori Silkworm Hybrids in Northern Mindanao	This study brings the new hybrids into the fields of two sericulture farms in Misamis Oriental and Cagayan de Oro City for verification	Seri-farmer-partners; Sericulture farmers in Misamis Oriental and Cagayan de Oro	Jan 2021 - Dec 2021	3,874	GAA	new

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Development of Digital Printing Technology using Philippine Natural Dyes for Natural Fiber Based Textiles	<p>trial to validate and establish the individual performance of the hybrids in two locations across varying altitudes</p> <p>This project focus on the improvement of the printing quality of the natural dye-based digital printed textile through the development of digital printing technology using natural dye-based inkjet inks.</p>	Textile and printing industry sector; MSMEs, designers, artisans NatDyes production hubs and facilities	Jan 2021 - Dec 2021	1,487	GAA	new
SMART TEXTILE R&D PROGRAM						
Color Tunable Luminiscent Carbon Quantum Dots (CQDs) Ink from the Decortication By-Product of Banana Pseudostem for Textile Authentication	The project will develop an environmentally safe, cost-effective, luminesce, and color-tunable CQDs-based ink using the banana pseudostem decortication by-product accumulated as a carbon source by adopting the one-step hydrotherma;/solvothermal method for a conceiling/reveiling process and direct visual readout under normal light and UV light illumination.	Textile manufacturers	Jan 2021 - Dec 2021	1,898	GAA	new
TEXTILE NANOTECHNOLOGY R&D PROGRAM						
Cellulose-Based Electrospun Nanofiber Support Membrane for Biosensing Application	This study aims to develop an electrospun cellulose-based biosensing membrane for whole cell bacterial detection, an antibody functionalized gold nanoparticles that will serve as specific receptors to detect representative sample of gram positive and gram negative bacteria.		Jan 2021 - Dec 2021	2,544	GAA	new
INTEGRATED TEXTILE PRODUCT DEVELOPMENT						
The Digitalization of Traditional	To establish digital database of the	Academe/students taking Textile and	Jan 2021 - Dec 2021	2,415	GAA	new

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Filipino Wear thru the Facilities of the PTRI Textile Product Development Center (TPDC)	traditional Filipino textiles and apparel that will elevate the applications as the availability of the pattern and design details.	Fashion Fashion and Costume designers				