

Current Activities of SWA Research in 2012

(R = Research, SF = Semi-Field Test, F = Field Test and C = Commercialization)

Country	Materials	2011	2012 Fill in the results	2013 Fill in the planning	2014 Fill in the planning
Bangladesh	Acrylamide / HEMA Acrylamide / K-Carrageen	R (Acrylamide / CMC)	Optimized the conc. of components and radiation dose. 26,000% water absorbent obtained	Plan to carry out pot test. Try for other raw materials	SF followed by F
China	Inorganic / cellulose	R (Inorganic / cellulose based SWA) SF	-	-	-
Indonesia	PEO / Alginate Acrylamide – Acrylic Acid	R (Acrylic acid – cassava starch SWA)	SWA mixed with o-alginate for controlled release (R), Pot test on Zea Mays	Pot test of SWA on wheat	Field test of SWA on wheat
Japan	CM-Cellulose CM-Starch	R (CM-Cellulose, CM-Starch blend), SF (Tomato, CM-Cellulose SWA)	Result of using CMC in tomato grown in green house condition(SF)	SF(Use of controlled release fertilizer CMC on Tomato plant in sandy soil on greenhouse)	SF(Use of controlled release fertilizer CMC on Tomato plant in sandy soil on greenhouse)

Kazakhstan	TBD	TBD	S(Choosing the raw material)	TBD	TBD
Malaysia	Sago waste	R (Sago waste / oil palm waste) Sandy soil, SF	Pot test (Sago Waste SWA)	Greenhouse/SF test on vegetable and chili plants	SF/F (nursery and crop plantation – oil palm and rubber)
Mongolia	Starch		R(Wheat Husk) SF(Potato)	R(Wheat Husk) SF(Potato)	SF(Wheat)
Philippines	CM-Karrageenan	R & SF in sandy soil	R + SF in sandy soli(Corn, Soybean)	SF(Crop to be decided later) R(Optimization)	SF (Crop to be decided later)
Thailand	Acrylic acid grafted cassava starch	F & Pre-Feasibility Study	SF (bamboo, rubber tree)	F (rubber tree)	F (rubber tree) & C
Vietnam	Acrylic acid grafted starch	F & C (Coffee, mushroom)	F (the addition of ~30-60kg SWA/ha increased 22 and 25% the yield of peanut and coffee bean respectively), C (in cooperating with companies for commercializing of SWA in domestic and exporting)	R (preparation of SWA using coir dust and immobilization of PGP in coir dust SWA) F & C (Starch-AAc SWA)	SF (immobilized coir dust SWA for crop and potted plant) F & C (starch-AAc and coir dust SWA)

