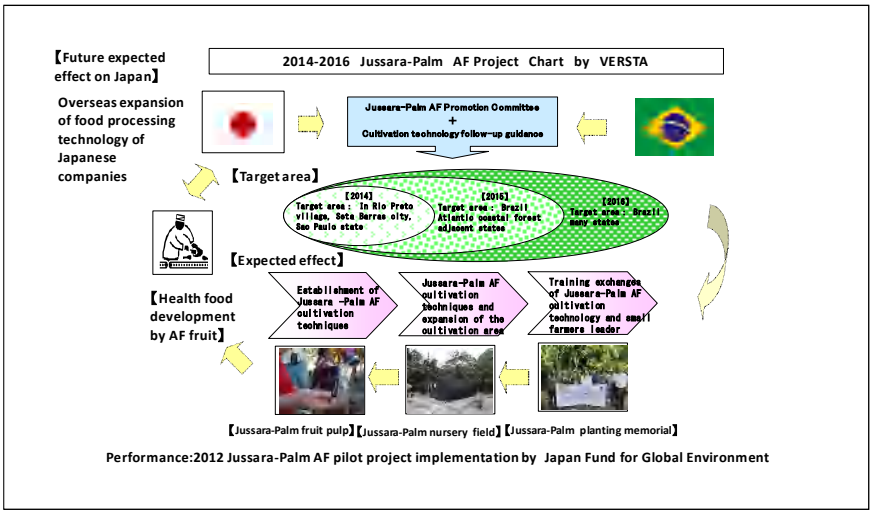
Aug4, 2015
The NPO VERSTA

2014-2016 VERSTA's Jussara-Palm AF Project and 2015 Project Plan by Japan Fund for Global Environment

This project' s name is the Brazilian Atlantic coastal forest (Mata Atlãntica) conservation promotion project by small farmers spread of agroforestry with Jussara-Palm(*Euterpe edulis*) and other crops.

Purpose of the activity	The ultimate goal of this project is that to achieve the prevention of global warming through the conservation of the Atlantic coastal forest (Mata Atlãntica) in Brazil that has been harvested 97% by the agricultural development. And our project is able to build to the economic independence of small farmers living in Mata Atlãntica by disseminating agroforestry (AF) with Jussara-Palm and other Brazilian Crops. This project is intended to form a network of industry, academia and government to establish a sustainable farming methods do not depend on the illegal logging forest.
Challenges recognition in the activity	Our project was carried out AF promotion project using 2012 Japan Fund for Global Environment. As a result, by the Jussara-Palm AF promotion PJ meeting and pilot project act in Rio Preto village, Seta Barras city, Sao Paulo state, the following subjects became apparent. 1) The need for soil improvement by appropriate fertilization 2) Possibility of organically grown coffee mixed planting by Jussara-Palm AF 3) Development of Jussara-Palm fruit pulp processing technology 4) Potential as a raw material for nutrition food and health food of Jussara-Palm fruit pulp 5) Possibility of Pau Brazil mixed planting cultivation that is a tree of Brazil country originated etc.
Background of the	Brazil is the country of the world's largest Japanese

activity	immigrants, about 260,000 Japanese went to Brazil before World War II through the postwar period. Many Japanese immigrants are engaged in cotton plantations and coffee plantations etc.in Brazil, to demonstrate the inherent politeness and patience, played a significant contribution to agricultural development in Brazil. However, the Atlantic forest (Mata Atlãntica) and the Amazon of Brazil has continued to the present decrease of tropical rainforest by developing large-scale illegal logging and due to delays in improving the lives of local residents, if you leave it, Brazilian rainforest that has been concern can be reduced significantly.
The grant amount in 2015	¥2,000,000- (Amount of aid for three years is ¥5,600,000 by VERSTA)
2014-2016 Jussara-Palm AF Project Chart	
Effects of the grant activity in 2014	Effects of 2014 activity of this Project are follows. Activity 1: Understanding has deepened for the solution of AF technology challenges by holding Jussara-Palm AF Promotion Committee and AF technology exchange with Cooperativa Agricola Mista de Tomé-Açu/Para (CAMTA) . Activity 2: We established a model Jussara-Palm AF field is 1ha by 9 small farmers. Activity 3: Jussara-Palm AF cultivation technology has promorted with follow-up guidance by Brazilian counterpart team. Activity 4: Jussara-Palm AF promotion seminar was held twice, there has been a participant of more than

	60 people.
Implementation Schedule	· Aug.28～29, 2015: Two villages in Sete Barras city, holding of Jussara-Palm AF support Project meeting and the technology exchange with experts. ·Aug.2015-Mar.2016: Two villages in Sete Barras city, installation of Jussara-Palm AF model field will be 1.5 ha. ·Sep.2015-Jan.2016: Two villages in Sete Barras city, implementation of Jussara-Palm AF cultivation technology follow-up guidance. ·Oct.2015-Feb.2016: In Sete Barras city and São Paulo city, implementation of Jussara palm AF seminar for other farmers.
Implementation members	◆Japanese organization: Projects committee Jussara palm in the NPO VERSTA (**Dr. Masaaki Yamada**/Associate Professor-Tokyo University of Agriculture and Technology Graduate School of Agriculture, **Mr. Toru Tanaka**/Professor-Niigata University, Ex-president Brazil Yammer, **Mr.Akio Chikai**/President ,Café do Centro Japan Co., Ltd, **Dr.Yoshikazu Onose**/Associate Professor-Takushoku University). ◆Brazilian counterpart organization: Co-Projects committee Jussara palm with Brazil and Japan(**Dr. Guenji Yamazoe**/ Presidente da Comissão do Prêmio Kiyoshi Yamamoto. Former minister,State of Sao Paulo Institute of Forestry Department of Environment. **Mr. Wagner Portilho**/Forest Foundation. **Mr. Gilberto Ota**/Manager of Agricultural Department,The Sete Barras City. **Mr. Luiz C.Fazuoli**/Campinas Agricultural Research Institute(CAI).**Dr. Fernando Silveira Franco**/ Professor, University of Federal de São Carlos. **Dr. Celso C.Lopes**/ Associate Professor, University of Campinas(UNICAMP). **Mr. Geraldo Francisco de Aguiar** /Leader of Rio Preto Sete Barras,etc.),other.

【Photos Report of 2014 Activities】

1) Rio Preto villarge in Sete Barras city






2) Visiting MN Própolis, Inc. in Mogi das Cruzes city



3) Visiting CCBJ in São Paulo city

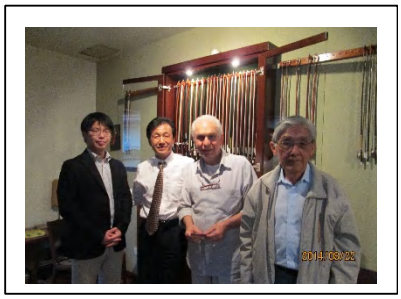


4) Visiting Instituto Forestal(IF) do São Paulo Government



5) Visiting TV-BAND

6) Visiting Stringed instrument bow manufacture master craftsman Mr. LAMBARDY



【References】

List of substances and antioxidant component activation key of life (excerpt) fruit from Brazil

Fruit from Brazil (excerpts)		Vitamin C (mg/100 g fresh mattera)	Total anthocyanins (mg/100 g fresh mattera)	Extractable polyphenols (mg GAE/100 g)
Name	Species			
Acerola	Malpighia emarginata	1357 ± 9.5	18.9 ± 0.9	1063 ± 53.1
Camu-camu	Myrciaria dubia	1882 ± 43.2	42.2 ± 17.0	1176 ± 14.8
A:Açaí, assai	Euterpe oleracea	84.0 ± 10	111 ± 30.4	454 ± 44.6
B：Juçara, Jussara	Euterpe edulis	186 ± 43.3	192 ± 43.2	755 ± 8.3
B/A (%)		221.4	173.0	166.3
Function		*Prevention of scurvy *Promote absorption of minerals	* Antioxidant (to prevent hardening of the arteries, stroke) * Suppression of muscle fatigue	*Antioxidant effect *Hormone promoting activity

Source：Maria do Socorro M. Rufino “Bioactive compounds and antioxidant capacities of 18 non-traditional tropicalfruits from Brazil”,Food Chemistry 121 (2010) 996-1002