Banwa Jiquitaia Pepper is a blend of several varieties of peppers (Capsicum spp.) organically grown by Banwa indigenous women in forest and home gardens in the Içana River Basin, packed with a touch of special salt flower. Production and distribution are organized by young indigenous managers, such as Graciela Brazão (photo), through a network of Casas de Pimenta being set up across the Banwa territory.

ALEX ATALA / INSTITUTO ATÁ

We chefs can do a lot to protect our biomes and cultures. A good example is Banwa pepper. The result of an amazing project with the Banwa community, this pepper bowled me over, along with other chefs across the world.

In addition to being extremely versatile, it is delicious, hot, but not long-lasting. It not only enhances the flavour of ingredients, but also offers a unique taste sensation.

Getting to know this pepper is more than a gastronomic experience, it is a cultural experience. By valuing it we are valuing one of the richest cultures of our country, albeit one almost unknown to us Brazilians – the culture of the Banwa.

To discover and appreciate our flavours is to care for our biodiversity.

FOR MORE INFORMATION
http://www.artebaniwa.org.br/
https://www.facebook.com/PimentaBaniwa/
E-mail: pimentabaniwa@gmail.com

Banwa men are renowned weavers of aruã fibre. Their decorated basket work has long been traded in the upper Rio Negro region on Brazil’s frontiers with Colombia and Venezuela. From 1988, after the demarcation of the indigenous territories in the Rio Negro region, FOIRN and its affiliated organizations, in partnership with ISA, began developing a set of pilot projects to enable indigenous communities’ priority initiatives as part of a Regional Programme for Sustainable Indigenous Development. This led to the Banwa Art project, by which Banwa basketry conquered a specialist niche in markets for products with added socio-environmental value. The insistent demands by Banwa women led in 2005 to the idea of marketing Banwa Jiquitaia Pepper.
BANIWA
JIQUITAIA PEPPER
PIMENTA BANIWA JIQUITAIA

SÃO GABRIEL DA CACHOEIRA & SÃO PAULO
2018
BANIWA RESEARCHERS AND COLLABORATORS: Aloncio Garcia (Mádzeero School / OIBI); André Fernando Baniwa (President of the Board of OIBI); Adélia Brazão da Silva (Parattana School / JCA bursary holder); Carina da Silva Valencia (Walipere Dakenai School / JCA bursary holder); Carlos da Silva (Walipere Dakenai School / JCA bursary holder); Silvia Garcia da Silva (Mádzeero School / JCA bursary holder); Edson José Garrido (Eenawi School / JCA bursary holder); Ronaldo Camico Amaro (Parattana School / JCA bursary holder); Elton José da Silva (EIBC-Pamáali School / JCA bursary holder); Justina da Silva Lopes (Walipere Dakenai School / JCA bursary holder); Paula Florentino da Silva (EIBC-Pamáali School / PJC1 bursary holder); Jovelino Pereira (Walipere Dakenai School / JCA bursary holder); Vanira Garcia Guilherme (EIBC-Pamáali School / JCA bursary holder); Ronaldo Apolinário and Osinete Paiva (Managers of the Dzooro/Tunui Cachoeira Casa da Pimenta); Orlando Andrade Fontes and Graciela Paiva (Managers of the Manowadzaro/Ucuqui Cachoeira Casa da Pimenta); José Brazão and Fátima Camico (Managers of the Pamáali/Escola EIBC Casa da Pimenta); Leonardo Garcia and Patricia Garcia (Managers of the Dzooro/Tunui Cachoeira Casa da Pimenta); Ivan Laureano and Julia Aurora (Managers of the Tsitsiadoa/Yamado Casa da Pimenta); Alfredo Feliciano Miguel Brazão (Marketing Manager/OIBI); Armindo Feliciano Miguel Brazão (Marketing Manager/OIBI); Natasha Mendes Cavalcante and Felipe Storch de Oliveira (ISA advisory for socio-environmental business).

RESEARCH AND FINAL DRAFT COORDINATION: Adeilson Lopes da Silva/ISA (PAII Bursary holder)

ASSISTANT RESEARCH COORDINATORS: Laise Lopes Diniz/ISA and Aloncio Garcia/OIBI

PHOTO EDITORS: Adeilson Lopes da Silva and Beto Ricardo

IMAGE RESEARCH AND PREPARATION: Cláudio A. Tavares/ISA and Vivian Sena de Oliveira/ISA

COVER PHOTOS: © Beto Ricardo/ISA; © Roberto Linsker/Terra Virgem

MAPS: Renata Alves/ISA and William Pereira Lima/ISA

GRAPHIC DESIGN: Sylvia Monteiro

EDITOR: Vera Feitosa/Duo Projetos Gráficos

TRANSLATION: Tony Gross

CASAS DA PIMENTA NETWORK SUPPORTED BY

PRINTING COSTS OF THE BRAZILIAN PORTUGUESE VERSION SUPPORTED BY

This publication was produced with the financial support of the European Union. Its contents are the sole responsibility of Instituto Socioambiental and do not necessarily reflect the views of the European Union.

WARNING

Brazilian Federal Law No 13.123/2015 – Legal Framework for Biodiversity

Art. 8 This law protects traditional knowledge associated with the genetic heritage of indigenous populations against its unlawful use and exploitation.

Art. 11. The provisions of this law apply to access to genetic heritage or associated traditional knowledge and to the economic exploitation of any finished product or reproductive material arising from access to genetic heritage or associated traditional knowledge.
CONTENTS

INTRODUCTION 7
JIQUITAIA: WHAT IS IT, WHO MAKES IT 10
ORIGIN AND CULTURAL SIGNIFICANCE 12
FROM ÑAPIRIKOLI TO HUMANKIND 12
RITES OF PASSAGE 14
PEPPER FOR THE BODY AND SOUL 16
FUNCTIONAL FOOD 17
FOREST PLOTS, KITCHEN GARDENS, NETWORKS AND DIVERSITY 18
TRADITIONAL AGRICULTURAL SYSTEM OF THE RIO NEGRO: CULTURAL HERITAGE OF BRAZIL 21
PEPPER DIVERSITY ON THE IÇANA RIVER 22
VARIETIES OF PEPPER FOUND IN THE IÇANA COMMUNITIES 23
ACTIVE AGROBIODIVERSITY SOCIAL NETWORKS 24
PREPARATION 38
COLLECTING 38
DRYING: SUN DRYING, ROASTING, COOKING, TOASTING 40
GRINDING AND SIEVING 41
SALT – TRADITIONAL AND CONTEMPORARY 42
TRADITIONAL AND CONTEMPORARY USES 44
RECIPES 46
MARKETS 53
CASAS DA PIMENTA 55
THE PROJECT AND ITS PARTNERS 60
GLOSSARY 61
NOTES ON THE SPELLING AND PRONUNCIATION OF BANIWA WORDS 61
SOURCES 62
INTRODUCTION

This publication brings together a wealth of important information on an experience involving the production and marketing of Jiquitaia Pepper produced by the Baniwa communities of the Ícana and Ayari Rivers. A project that involves research on and development of this product, implemented through a partnership involving ISA (Instituto Socioambiental), Oibi (Indigenous Organization of the Ícana Basin), CABC (Coordination of Baniwa and Coripaco Associations), Foiri (Federation of Indigenous Organizations of the Rio Negro), Eibc-Pamáali (Baniwa and Coripaco Indigenous School Pamáali), Abric (Baniwa Association of Rio Ícana and Cuiari / Tunui Cachoeira Community), Cedeh (Centre for Study and Outreach of the Herieni School / Ucuqui Cachoeira Community), EIBP (Paraattana Indigenous School), Mädzeero Indigenous School, Waliperedakenai Indigenous School / Canada Community, Eenawi Indigenous School and the Yamado Community.
The research that generated most of the information presented here was funded by Fapeam (Amazonas Research Support Foundation), through its Young Amazonian Scientist Program (Call for Proposals 010/2006 - Call II). Entitled “Peppers in the Içana-Ayari Basin Project: foundations for the sustainability of production and marketing”, the research was carried out between 2007 and 2009 based on an R&D demand presented at Oibi’s annual assembly in 2005. This was taken up by the ISA team in collaboration with indigenous researchers from five regional schools, that in turn networked directly with about 27 communities in the river basin. The results (Silva, 2010) constitute a baseline for monitoring the impacts of the project in different fields: the diversity and distribution of the variety of peppers in the basin, the daily routine and the use of time by the women producers, and the circulation of genetic material through exchange networks in the Baniwa territory.

The Baniwa are an Arawak-speaking indigenous people, with a total population of approximately fifteen to eighteen thousand people. They live in about 200 communities and settlements, forming part the north-western Amazon cultural complex, along the headwaters of the Rio Negro basin, spanning Brazil, Colombia and Venezuela. For thousands of years the Baniwa in Brazil have occupied the Içana river basin, where 95 communities and settlements inhabited by 7-8,000 people are found. The Baniwa are subdivided into phratries, considered as brothers among themselves, who maintain relations of cultural and material exchanges based mainly on marriage exchange (Wright, 1990; Garnevo, 2002). The main phratries are the Waliperedakenai (Grandchildren of the Pleiades), Hoohodene (Grandchildren of the Inhambu (Tinamou) / Children of the Sun), Dzawinai (Grandchildren of the Jaguars) and the Coripaco, with their subgroups Komadaminai (Grandchildren of the Duck), Kapittiminanai (Grandchildren of the Coati) and Padzowalieni. Each phratry is made up of smaller groups, the sibs or clans. The Baniwa still maintain close relations of matrimonial exchanges with the Cubeo and Wanano groups, mainly in the region of the headwaters of the Ayari River.
JIQUITAIA
WHAT IS IT, WHO MAKES IT

Jiquitaia (or juquita, giquitaia, jiquitaya, jektaia) is a word of Tupi origin used to refer to a powdered mixture of salt (yuk) with pepper (taya) (Cunha, 1924). Other variations include iekitsia or iikut (Stradelli, 2014).

In the Baniwa language the terms used to refer to jiquitaia are aatti iipepe (dried pepper) and, above all, aatti itodakepe (ground pepper). Aatti in Baniwa means pepper. The similarity with the Spanish term aji arises from the Taino term, haxi or axi, for pepper. The Baniwa are Arawak relatives of the Taino, a people who occupied the islands of the Caribbean when Columbus first came into contact with these plants, introducing these, along with their Arawak terminology, to Europe.

Other native peoples of the Rio Negro and Amazonia produce and use jiquitaia as an essential ingredient of their cooking (Nascimento-Filho et al., 2007). To clarify: in Amazonia the term jiquitaia also refers to a tiny reddish, non-edible ant of the genus Solenopsis, that forms colonies in places like forest gardens, secondary forest and thatched roofs. Its sting is quite painful, burning like pepper, a sensation that can last for up to three days.
ORIGINS AND CULTURAL SIGNIFICANCE

Peppers of the genus *Capsicum* are without doubt one of the most symbolic components of the agrobiodiversity managed in the Baniwa territory. They are imbued with meanings well beyond their nutritional, culinary and cosmetic values, occupying a prominent role in the social and cosmological system of these people.

According to the Baniwa themselves:

“Pepper is at the heart of our culture, at the heart of our diet, at the heart of our traditional upbringing, at the heart of our medicine that protects us against evil spirits that attack people, at the heart of the transmission of Baniwa knowledge and ethics. There are several episodes in which the Ñapirikoli [the great mythical Baniwa hero] used the pepper to cook food. That is why, today, we walimanai [the human population currently inhabiting the world] use it in our day-to-day life. Pepper ensures us health and protection. It is our daily medicine” (Oibi / Abric / ISA / Foirn, 2013).

FROM ÑAPIRIKOLI TO HUMANKIND

Ñapirikoli, demiurge and source of the good things for the walimanai, has used the pepper since time immemorial. For this hero, pepper was his *liwaapere* or *limorodale* his shield-sword, adornment-power. At times of war, and other moments when defence was called for, pepper was an indispensable resource.

The appearance and first use of pepper is recorded in a mythical episode constantly recounted in Baniwa communities. Here it is told by Fernando Jose, of the Tukumá-rupitá community. At the time, Ñapirikoli used pepper to cook raw fish, neutralizing the danger this posed to his life and health. It thus offers future generations a technique for protecting and fundamentally purifying food, indispensable in Baniwa culinary practice to the present day.

“One day Ñapirikoli married Omaittadoa (piranha-woman). She belonged to the group of Ñapirikoli’s enemies. The following day he was invited to eat at the house of his father-in-law, head of the Piranha people. Ñapirikoli, knowing that this was to create an opportunity to kill him, prepared himself to bathe with his fellow guests. He turned himself into Ttiiripi, the swallow, and Kawawiri, the scissor-tailed flycatcher. In this way he would swoop down over the water, just skimming it. Thus, he bathed without any problems. If he dived into the water, he would be devoured by the Piranha. At the table, his father-in-law offered him a plate of food containing raw fish with barbs. One of Ñapirikoli’s guests, the heron, rushed to eat before the pepper was sprinkled, and choked. Ñapirikoli had to care for him to save him. Thus it was that Ñapirikoli took the pepper from his liwaapere and added it to the raw fish-food. Quickly the raw fish was cooked, and everyone could eat it without risk. In this way, Ñapirikoli’s enemies could not kill him.

Another time Ñapirikoli used the pepper was when he was swallowed by the snake-enemy. With his liwaapere he protected himself in this snake’s stomach in order not to die. With the pepper he killed the snake. With the liwaapere he opened the snake’s belly to get out and save himself.

In the context of the everyday life of the Baniwa people, pepper is medicine: the remedy that prevents (heals), cures (kills the disease) and restores (reinforces the body after killing the disease). This is the essential social function of pepper according to Baniwa culture.”

---

1 The two narratives presented here and the information on which this section was based were recorded by André Fernando Baniwa from his father Fernando José.
After the ritual, both will be ready: trained for the world, as the Baniwa say. One of the most important moments, signifying the end of the ritual, is when the young initiates taste pepper fruits blessed by the adults. This occurs after a long period of reclusion, fasts and restricted diets, which formerly lasted one to two months. In this way, say the shamans, the young Baniwa will have their bodies “cooked” by the pepper, which guarantees a kind of invisible shield for each: the liwaapere that protected the hero Ñapirikoli. This immaterial “cooking” of bodies is completed by lashing with whips. The Kalidzamai prepares future generations to live well in their ancestral territory.

At one point in the blessing, the leaders of the ritual also name the pepper according to the clan association of the young initiate, revealing a very interesting aspect of the intertwining of biodiversity, sociodiversity and territoriality among the Baniwa.

These are the ceremonial moments of collective public use of pepper for protection against the invisible worlds to which humankind is exposed. They are moments for recalling stories, for transmitting knowledge, for establishing a vertical connection between this world and the worlds of the spirits, for deep learning, for counsel and sharing experiences about Baniwa ethics. And also, for parties, with lots of music, food and dancing.

The chief of these is the Kalidzamai, the ritual of blessing food, especially pepper, which marks the end of the period of reclusion of young people during the process of initiation into adulthood. In evoking the Kalidzamai, clay pots are arranged in the centre of the group. They contain pepper, the “weapon of the singers” (Wright, 1996), the knowledge-holders who conduct the ritual.

Following their first menstruation, girls receive a course of instruction, called naiteetakano. The Kalidzamai also occurs for boys, at the right time, and the training is called nakapeetakana.
PEPPER FOR THE BODY AND THE SOUL

By referring to pepper and tobacco as “food for the body and the soul”, Oliveira (2015) makes interesting points about what he considers exclusive “emblems” that differentiate Baniwa clans from each other, and between these and the “brancos” (non-indigenous people).

These emblems, referred to in Baniwa by the terms inaikhi yanhenke “clan identifier”, or inaikhi hedali, “that which comes from the clan”, are, according to the author, the constructions by which the Baniwa administer a unique relationship: a means by which the Baniwa are able to describe both the differences between indigenous peoples and between these and the “brancos”; "things" that mediate between these people.

According to multiple versions of myths gathered by Oliveira, after leaving the underworld and acquiring their bodies, humans receive from Ñapirikoli (and/or Dzóoli [another Baniwa demiurge]) a series of attributes that differentiate them from each other: varieties of pepper, tobacco and cassava; artifacts such as “profane” and “sacred” ceremonial instruments; intangible and difficult to classify goods such as different languages; a portion of territory and, within this, the “house of the dead.” Each clan ancestor received a variety of tobacco and pepper different from that received by the others. Oliveira interprets the commentary by Hill (1993) on the emergence myth of this people, which records how Ñapirikoli gave each ancestor of the different Baniwa groups a pair of grandparents to look after the sacred tobacco and pepper used for cures and other purposes rituals by their present day descendents (Wright, 1996).

Functionally, specific peppers, used very selectively, are a resource for beautification and for delaying the aging appearance of the face. This prevents the evils that attack the face and which date from the creation of the world.

FUNCTIONAL FOOD

The power of peppers to improve the health and well-being of people is recognized worldwide. A series of benefits are attributed to peppers, including: reduction of cardiovascular diseases, anti-oxidant potential, anti-cancer properties, analgesic action, anti-ulcer, influence over the nervous system, improvement of the respiratory system, anti-inflammatory action, anti-depressant action and the ability for metabolic acceleration contributing to weight loss. In 2015, a Chinese study found that people who consume spicy foods almost daily are 14 percent less likely to die than those who eat spicy foods less than once a week (Français-Presses, 2015).

This power to generate beneficial effects is mainly attributable to capsaicin, an alkaloid compound responsible for the burning sensation. However, currently in Brazil there is no entry in the records of Anvisa (National Public Health Monitoring Agency) of foods with claims of functional and/or health properties attributed to peppers of the genus Capsicum.
FOREST PLOTS, KITCHEN GARDENS, NETWORKS AND DIVERSITY

W e owe world to indigenous agriculture the domestication of the many plants that form part of the food and agriculture heritage of Amazonia and the. This phenomenon is not simply one that occurred in the past but is one that continues in the present. For example, on the Rio Içana, Baniwa communities manage, conserve and create extensive biodiverse and agrobiodiverse landscapes.

Among the Baniwa, the cultivation of gardens is an age-old practice, especially for women. It occurs once the men have cleared and burned small areas of primary or secondary forest, in the latter where the land may have been untouched from 12 to 35 years or longer (Silva, 2004). A principal characteristic

Dona Herminia Garcia harvests peppers in a forest garden, Tunui Cachoeira, middle Içana. © Beto Ricardo/ISA, 2013

FIGURE 2: DAILY ROUTINE OF WOMEN PRODUCERS OF BANIWA PEPPER, SHOWING TIME SPENT IN GARDENS AND ON FOOD PROCESSING. THE DATA GENERATED BY THE RESEARCH WILL BE USED TO MONITOR LONG-TERM IMPACTS OF THE BANIWA PEPPER INITIATIVE
is the absence of external inputs, such as agrochemicals and heavy machinery, and the rich symbolism associated with caring for the earth, plants, and objects that revolve around the universe of the gardens and the processing of food. This low environmental impact system ensures the regenerative capacity of the forest such that its future ecosystem services and uses continue possible.

It is the women, the major part of whose days are devoted to their forest and kitchen agroforestry gardens and to food processing activities, who are mainly responsible for the food and nutritional security of the 200 Baniwa communities and settlements to be found on the Içana, Avari, Cuiari and Negro rivers in Brazil, Colombia and Venezuela. To enable this, each family bases and synchronizes its cultivation in at least three plots: a new plot in formation, a mature plot where most of the harvesting occurs, and a plot in regeneration where the area is about to be freed up so that forest succession regenerates the area for future cultivation.

Nowadays indigenous agroforestry gardens are increasingly recognized as important systems for conserving and creating agrobiodiversity. Indigenous lands in Brazil are above all areas that conserve and adapt substantial food and agricultural resources. These services, still unseen and undervalued, are fundamental to our ability to adapt to the effects that climate change will have on agriculture worldwide.

Indigenous territories are also key elements in global climate security. They are areas highly efficient for protecting forest environmental services and carbon stocks.

In November 2010, the Traditional Agricultural System of the Rio Negro was declared part of Brazil’s cultural heritage by Iphan (National Institute of Historical and Artistic Heritage) (http://isat.to/2oueZCJ). Cultural heritage is understood as a set of knowledge and ways of transmitting this that are interrelated and which, in this particular case, includes: the diversity of cultivated plants, the management practices in forest and kitchen gardens (the spaces of cultivation), the food system (the recipes and processes of transforming raw materials), processing and storage techniques, in other words the material culture, and finally, the existence of social networks for the exchange of plants and associated knowledge (Emperaire, 2010). The cultivation of wild cassava (Manihot esculenta) by means of the coivara (swidden) technique, and the exchange of knowledge and plants, is the basis of this system, shared by more than 20 indigenous peoples living along the Rio Negro, in an area that includes the municipalities of Barcelos, Santa Isabel do Rio Negro and São Gabriel da Cachoeira in the north-western Amazon along the borders with Colombia and Venezuela.

The declaration of the Traditional Agricultural System of the Rio Negro as part of the immaterial heritage of Brazil emphasizes:

“Nowadays the diversity of forms of production is considered from another angle, that of biodiversity conservation, and the impacts of agricultural activities are analysed in environmental terms. Biodiversity generated by human groups, through processes of domestication and selection, is also seen in terms of genetic resources in the face of climate change.

Economic instruments, with varying forms of certification or recognition of intellectual rights, acquire an increasingly visible space in the markets and help raise consumer awareness of the diversity of production.

However, the diversity of forms of production goes beyond the realm of the technical. It relates to the multiple records of the social and cultural life of societies. To produce vegetables, animals or micro-organisms, is not only to mobilize knowledge, concepts, tools and social relations, but also to express a particular view of the world and of society.
The use of the term “system”, a set of interacting elements (Delattre, 1984), in the dossier title flows from the breadth of the heritage in question. Going beyond the notion of agriculture to that of an agricultural system means showing interactions between this field of activity and other domains of the social, cultural and material life of a group, without limiting the viewpoint to a functional record. We are dealing with an open system, built around societies-spaces-plants relationships that incorporate certain elements in accordance with cultural, ecological, historical or political contexts” (Empereire, 2010).

PEPPER DIVERSITY ON THE IÇANA RIVER

After cassava, peppers of the genus Capsicum spp. are one of the most important and common crops in the forest and kitchen gardens of the Rio Içana. Such importance can also be measured by the frequency with which peppers feature in the culinary traditions of the region (Garnelo & Baré, 2009) and in the role they play in the social and cosmological system (Oliveira, 2015; Wright, 1996).

Peppers are widely distributed throughout Amazonia (Barbosa, et al., 2002) and the basin is considered the centre of domestication and of the greatest diversity of the species Capsicum chinense, considered the most Brazilian of the five cultivated pepper species (Reitschneider, 2000).

This diversity can be seen on the Içana River, where women cultivate their peppers, either in forest gardens – usually the newest of the three plots each maintains – or in the gardens of peppers grown in specially prepared kitchen plots.

The diversity found in these gardens is enormous. Our survey, conducted in the fields of 40 communities in the basin, enabled us to draw up a list of 78 varieties of peppers grown there. Without doubt, this raises the Rio Içana region to the level of an important focus of diversification of the species and one that is critical for future initiatives of on-farm protection of the genetic resources of the Capsicum genus in Brazil.

Between 80 and 90% of the varieties found in Baniwa gardens belong to the Capsicum chinense - Capsicum frutescens complex. It is within this complex that we find the hottest and most aromatic varieties of known peppers (Habaneros, Jolokias, Murupis, Malagueta, Pimentas de Cheiro, Pimenta Bode). This range of diversity managed by Baniwa women gives the jiquitaia they produce the features by which the spice has become known: highly spiced, with intense aroma and flavour.
1. **AALIHITAKO**
   **PIMENTA BICO DE JABURU**
   **STORK BEAK PEPPER**
   The Bico de Jaburu (Stork Beak) pepper is a variety with one of the largest and most elongated fruits among those grown on the Içana, reaching 6 cm in length. The plant is fast growing on inter-fluvial dry land. It is a medium-hot variety, much used in the preparation of quinhampira (regional fish sauce). The fruits, when mature, go from purple to deep red.

2. **AAMO**
   **PIMENTA ROXA**
   **PURPLE PEPPER**
   A purple pepper with a long fruit with an uneven surface, which can reach 3 cm. When ripe, the fruit is purple. It is hot and highly aromatic. The higher the proportion of this variety in the mixture, the darker the jiquitaia will be.

3. **AAWI**
   **PIMENTA AGULHA MALAGUETA**
   Shaped like a sewing needle, this is one of the hottest varieties grown on the Içana. The fruit is small, at most 2 cm long, and grows upright from the plant. Although widely grown in the rest of Brazil, it is not a common variety found in gardens on the Içana.

4. **BOTAOTHE**
   **PIMENTA BOTÃO (PIMENTA DE BODE)**
   **BUTTON / BILLY GOAT PEPPER**
   Shaped like buttons, its fruits are small, maximum 2 cm long, and red when ripe. Difficult to find, mostly in gardens on the middle Içana.

5. **DZAKA INAPA**
   **PIMENTA BRAÇO DE CAMARÃO**
   **SHRIMP ARM PEPPER**
   Shrimp arm pepper is very hot, and its flavour is highly appreciated by the Baniwa. Producing few seeds, it is difficult to obtain and plant. Can reach up to 7 cm.

---

2 Translators of names into Portuguese: Aloncio Garcia and Elton José da Silva, indigenous researchers and holders of Young Amazon Scientist Programmes scholarships. Also given are the names by which these varieties are commonly known in the rest of Brazil.
6. **Dzakoithe (Pimenta de Cheiro)**  
**Pimenta Fruta de Abacatirana/ Pimenta da Caatinga**  
**Abacatirana Fruit / Caatinga Pepper**  
Its fruits resemble the Abacatirana (Dzako), a fruit tree of the caatingas (sandy soil regions) of the Rio Negro. Yellow pepper, very attractive, and moderately hot. It is highly appreciated by the Baniwa, just like the Abacatirana fruit itself. Additionally, it is a very resistant plant, growing vigorously even on the sandiest soils. For this reason, it is the most widely found variety in the gardens of the basin. The fruits are 2 cm long.

7. **Dzaatte Hitako**  
**Pimenta Bico de Tucano**  
**Toucan Beak Pepper**  
One of the group of large and commonly found peppers in Baniwa gardens. The fruit reaches up to 6 cm in length.

8. **Dzewetshe**  
**Pimenta Dente de Onça (Dedo de Moça)**  
**Jaguar Tooth / Maiden’s Finger Pepper**  
Has a very sharp point, just like a jaguar’s tooth. Produces fruits in abundance. When ripe the fruits are red and reach 5 cm in length.

9. **Dzoodzo Hitako**  
**Pimenta Bico de Peixe Lapis**  
**Pencil Fish Mouth Pepper**  
Shaped liked the mouth of the pencil fish, its fruits are red when ripe. Up to 4 cm in length.

10. **Eewaapa**  
**Pimenta de Caba Amarela**  
**Yellow Hornet Pepper**  
Yellow fruit, 3.9 cm long. Very hot.

11. **Ixedonithe**  
**Pimenta Fruto de Ixedoni**  
(Árvore da Beira do Rio)  
**Ixedoni Fruit Pepper**  
The ixedoni (a riverbank tree) fruit pepper reaches 2 cm in length and its fruits are yellow when ripe. Produces a lot of seeds and is very hot.

12. **Halené**  
**Pimenta Branca**  
**White Pepper**  
The white pepper, so-called because the growing fruits are white, is yellow when ripe. The fruit is smooth and no more than 2 cm long.

13. **Haliakalisthe**  
**Pimenta Fruto de Haliakali**  
**Haliakali Fruit Pepper**  
Round peppers, like the fruit of a tree with this name occurring in flooded forest. Hot and strong smelling. Ripe fruits are yellow and 1.3 cm long.

14. **Hemalithe**  
**Pimenta Fruta de Abiu**  
**Abiu Fruit Pepper**  
Resembles the fruit of the abiu tree (Pouteria cainito), except that the fruits are much smaller, at 1 cm long.

15. **Hipothe**  
**Pimenta Fruta Verde**  
**Green Fruit Pepper**  
Ripe fruits are reddish, very hot and 2.2 cm long.
22. KATOTO  
Suggested translation:  
JOLOKIA BANIWA*  
The hottest of all the peppers in the Içana basin, considered dangerous by the women, who keep children away and handle the pepper very carefully so as not to burn their hands. Because of this, very few plants are grown. The peppers are big, with yellow fruit. When the women wish to test a man’s capacity to bear the heat of quinhampira or jiquitaia, they add katoto to the preparation.

* a reference to Bhut Jolokia, a pepper of the same family as Katoto and which was considered the world’s hottest by Guinness World Records. There is no translation to Portuguese of the name Katoto.

23. KAWATHSIDALIPE  
PIMENTA CAMUTI  
CAMUTI PEPPER  
Shaped like a camuti, the clay pot used to store caxiri (fermented drink). The fruit is very hot, highly aromatic and produces lots of seeds. Grows to 1.4 cm in length.

24. KEREKERETHE  
PIMENTA OLHO DE PERIQUITO  
(CUMARI)  
PARAKEET EYE PEPPER  
Pepper producing small fruit, less than 1 cm long, which are red when ripe. Generally harvested when green to avoid fruits falling to the ground or being eaten by birds. A variety that prefers new gardens from cleared secondary growth.
25. **KOITSI HITAKO**  
PIMENTA BICO DE MUTUM  
CURASSOW BEAK PEPPER  
Yellow when ripe, fruits are large (4.3 cm long), mild, with an intense aroma. Grows well on higher ground. Fructification begins when the plant is still small. Produces few seeds. Very good for quinhampira and jiquitaia.

26. **KOORI HITAKO**  
PIMENTA BICO DE COROCORÓ  
GREEN IBIS BEAK PEPPER  
The pepper with the largest fruits in the region (8 cm long). Fast growing plant, very productive in fresh soil. Initially purple, fruits turn yellow when ripe and fall from the plant. A variety much used by the Baniwa to make quinhampira and jiquitaia. Seeds widely shared among the women.

27. **KOOWHEIAALPHI**  
PIMENTA BUNDA DE SAÚVA  
LEAF CUTTER ANT BUM PEPPER  
Bright red when ripe, fruits up to 4.3 cm long.

28. **KOPITTE**  
PIMENTA FRUTA DE CEBOLÃO  
ONION FRUIT PEPPER  
Small fruits (2.8 cm long), yellow when ripe. Highly spiced with a very agreeable aroma.

29. **KOWAIDATHE**  
PIMENTA FRUTA DE CASTANHA  
NUT FRUIT PEPPER  
Fruits measure 3-4 cm and are red when ripe. Mild with a highly favoured aroma.

30. **MAAKO**  
PIMENTA MARROM  
BROWN PEPPER  
A very hot pepper. The riper it gets, the browner it becomes. Fruits up to 2.6 cm long.

31. **MADZAWITHE**  
PIMENTA JURUBEBE  
JURUBEBA (NIGHTSHADE) PEPPER  
Fruits, which are smaller than 1 cm, are red when ripe. Very hot with aroma appreciated by the Baniwa.

32. **MAIPANALI**  
PIMENTA TAPIOCA DE INAMBU  
TINAMOU TAPIOCA PEPPER  
A very hot variety and one of the most aromatic. Fruits reach 2.8 cm long, yellow when ripe.

33. **MAKOWEIITHI**  
PIMENTA OLHO DE URUTAU  
POTOO EYE PEPPER  
Very hot variety with a aroma different from any other. Red fruits up to 5.4 cm long.

34. **MAROLI HITAKO**  
PIMENTA TUCANO PEQUENO  
LITTLE TOUCAN PEPPER  
Yellow fruits, 2-3 cm long. Very hot.
35. **MOROPI** (name borrowed from Nhengatu language)

Recently brought to the Içana it is rare, found mostly on the lower river. Very productive when it flowers. Fruits up to 3.5 cm long, with yellow irregular shaped skin. Pepper with one of the most intense and pleasant aromas. Mild, produces a jiquitaia with an intense aroma.

36. **NERITHI**

**PIMENTA OLHO DE VEADO**

DEER’S EYE PEPPER

Small yellow fruit (1 cm). Very hot, pleasing aroma.

37. **PEERIHITAKO**

**PIMENTA BICO DE GAVIÃO REAL**

HARPY EAGLE BEAK PEPPER

Yellow fruit, medium to mild, pleasant aroma, 2.5 cm long.

38. **PERITSOTA**

**PIMENTA UNHA DE GAVIÃO REAL**

HARPY EAGLE CLAW PEPPER

Irregular skin, red fruits, very hot. Up to 5 cm long.

39. **PHITO-HIWIDA**

**PIMENTA CABEÇA DE GRILO**

CRICKET HEAD PEPPER

Tiny but special, as it is a highly aromatic variety, giving the jiquitaia a strong fruity flavour. Its fruits are no more than 1 cm long, brown or red when ripe. Ideal for seasoning smoked fish, a typical regional dish.

40. **PIRIKITOTHE**

**PIMENTA OLHO DE PERIQUITO**

PARAKEET EYE PEPPER

Very hot and aromatic, with small, round, red fruit (1 cm long).

41. **POMENHIRI**

**PIMENTA CHEIROSA**

AROMATIC PEPPER

Pepper with an intense aroma, very hot, small (1.2 cm) round fruit, yellow, with few seeds

42. **TTALATTALANE**

**PIMENTA LEVE E ACHATADA**

LIGHT FLAT PEPPER

Large mild fruit. A pepper for eating on its own, with no fish or meat, just salt and unleavened manioc bread when drinking chibé (manioc meal drink).

43. **WIITSHIA**

**PIMENTA PIPIRA**

TANAGER PEPPER

Pipira (tanager) pepper “is pretty” and grown by nearly all families in the Içana basin “because it is spread by the pipira bird”. There are sub-varieties, large and small. The fruit is red, hot and produces many seeds, a part of which germinate spontaneously in gardens. The standard wiitshia has 1 cm long fruit, while the large wiitshia Makadalipe reaches 1.8 cm and the small wiitshia Tsodalipe is less than 1 cm long.

---

**PEPPER PLANT “DONATED” BY BIRDS**

In tracking the circulation routes of material among Baniwa gardens ("who gives the seed?), there were several responses naming “the birds”. These are important dispersers of peppers in the region and account for almost 1% of the seeds (Figure 3, page 34). They also provide names for many varieties, as we have seen in the list above. As birds do not have receptors for capsaicin on their tongues, they do not feel the heat of the peppers and are excellent dispersers of such plants within the gardens of the Rio Negro.
Active Agrobiodiversity Social Networks

Phytogenetic material (pepper seeds and seedlings) move through Baniwa territory and social fabric on a daily basis. In general, such movements are associated with the most important events in the society, such as weddings, visits and religious events (evangelical meetings or Holy Communion) (Fig. 3).

This diversity circulates mainly between women, above all as gifts from mother to daughter (Fig. 4). This logic is compatible with that already verified in the case of cassava, as the logic of intergenerational transmission of a heritage good (Emperaire, 2010). The sizeable number of transfers between in-laws, members of belonging to different phratries, also places this circulation within what may be considered an interethnic logic (Fig. 5). This in turn also operates at a cross-border level, given that the place of origin of the material may be over the border in of Colombia or Venezuela.

**Figure 3:** Events giving access to breeding material (seed/seedlings) as related in formal interviews concerning 210 exchanges involving 108 donors and 100 recipients in 41 communities on the middle and upper Içana, the Ayari and Cuiari rivers, as well as the municipality of São Gabriel da Cachoeira.

**Figure 4:** Relationship of the donor of plant material.
The flow chart (Fig. 5) shows seed and plant exchanges among the main ethnic groups living in the Içana basin, demonstrating how dispersal of plant genetic material is diffuse, favouring its wide circulation among the groups.

These movements provide an explanation for the production and conservation of the huge diversity of peppers among the Baniwa and how this diversity is affected, or rather favoured, by these exchange networks.

It is possible that the wide circulation network we show here helps to increase cross-pollination rates and the creation of new types of pepper from such crossing. The Baniwa case is an example of how enrichment of agrobiodiversity depends on the active social networks that manage it (Emperaire, 2001, Peroni and Hanazaki, 2002). These processes can be seen as good indicators of the vigour of the (re)production capacity and maintenance of the genetic variability of plants grown in the region. We now know that this region is the centre of diversity of the most diverse group of peppers in the Amazon Basin, the species Capsicum chinense Jacq., is this region. This species is also by far the most cultivated in Içana gardens, representing the majority of morphotypes (varieties) found in the Baniwa plantations.
**COLLECTING**

Each Baniwa woman harvests small quantities of pepper daily. Most of this is destined for consumption by her family and community, either fresh or in the form of jiquitaia. At this stage mature, healthy peppers are preferred, harvested directly from the plant. In general, the peppers are transported from garden to community wrapped in embaúba leaves (*Cecropia* spp.), a plant commonly found on the edges of gardens and whose leaf is velvety on one side and siliceous on the other. This soft, dry and fresh envelope allows peppers harvested in the field to be preserved for a long time.

**PREPARATION**

There is no single recipe for preparing jiquitaia. The diversity of cultivated peppers, the proportion of varieties in the mixture, the different ways of drying and seasoning, with salt or other herbs, are the main factors responsible for the diversity of colours, textures and flavours arising from the jiquitaia produced by Baniwa women.

Although each woman’s blend is completely exclusive, a common identity is maintained: probably what we can call the stamp of its terroir, of geography, the white sandy soils that dominate the landscape of the Içana basin, the climate and the common features of how Baniwa women manage their gardens.

The research carried out through the partnership between technical staff of ISA’s Rio Negro Programme and indigenous researchers has already identified seven basic modes of preparation that lead to multiple interactions with the wide variety of peppers cultivated in the region.
GRINDING AND SIEVING

Once properly dried, the peppers are ground with a wooden mortar and pestle, an indispensable utensil for food processing among Baniwa families. This is almost always made of brazilwood or queenwood (*Brosimum rubescens*), a tree with one of the hardest and reddest heartwoods of the region. A few blows are enough to pulverize the skins of the fruit, preserving the seeds, which will be separated from the mixture using an arumã palm sieve. The activity is always done with one’s back to or out of the wind. Otherwise, the blowback of peppery powder onto the person sieving can cause nasty irritation of the skin, eyes or throat.

In the glasshouses of the Casa da Pimenta drying time is reduced from a week to twelve hours, fixing better the colour, aroma and nutritional properties of the fruits. © Roberto Linsker/Terra Virgem, 2013
SALT – TRADITIONAL AND CONTEMPORARY

Indigenous peoples of the Amazon used, and still use, little salt. The region, except on the coast, is poor in sources. In the interior, salt was obtained from leaves and fruits of certain vegetables reduced to ashes.

Another way to obtain salt was through trade with sub-Andean groups, who had access to large deposits in the high jungle of that region and traded this with Amazon peoples for dry fish, feathers, honey, furs and wood. Important providers were the Ashaninka people. Arawak speakers, like the Baniwa, they controlled the mines in the hills of the Cerro de la Sal in Peru. This region was both the main source of salt for Amazonian peoples, and the political, economic and spiritual center of the sub-Andean Arawak (http://piB.SocioAmbiental.org/en/povo/ashaninka/145). One clue to the linguistic and cultural proximity of these two peoples is precisely their word for salt: iiwi (Baniwa) and tsiwi (Ashaninka).

Historical records of the colonial period show that, on the Rio Negro, salt, called caruruyuquira, or caruru salt, was mainly obtained from caruru, a plant that grows on rocks in river rapids (Bueno 1998: 98).

“On the Rio Negro: On the rocks that form rapids, there grows a plant of fleshy leaves and very salty, which the natives call carurú. (...). Dwellers nearby, especially the Indians, use it to extract the salt which they then use. Thus carurú is an inestimable resource for the peoples of the upper Rio Negro. (laCerda, 1865)

Rock carurú is an aquatic macrophyte of the Podostomaceae family (probably Rhyncholacis aff. Linearis Tul.) that grows on the rocks of rapids on the Rio Negro and its tributaries. Its leaves, reduced to ashes, substitute kitchen salt (sodium chloride) although the taste is altered, in this case, by its high concentration of potassium.

Because of its rarity and the simplicity of its life cycle, whose location is the rock formations of the rivers of the region, we believe that any extensive use of this plant will inevitably have been subject to cultivation or exploitation techniques in nature under a very high degree of control. A research proposal is being implemented on the upper Rio Ayari, the success of which would allow the reinstatement of rock caruru as an ingredient of Baniwa pepper. Nowadays the use of such salt is very rare among indigenous people of the upper Rio Negro.

Research suggests a use of salt in the composition of Baniwa jiquitaia of between 0 to 12%. The proportion of 10% (mass to mass ratio) has been standardized for the jiquitaia currently marketed under the Pimenta Baniwa brand. The salt used in Baniwa pepper is very special: fleur de sel from Maras, the well-known mine in the Sacred Valley of the Incas in Peru.

Fleur de sel is a cluster of crystals that forms on the surface of the water, and which is carefully picked by the artisans working the mine. These crystals are called flowers, because this is the format in which crystallization occurs. It contains minerals and unique nutrients, absolutely natural, untouched by any industrial process. Each pot of Baniwa Pepper contains about 1.5 g of this precious salt.

Rock caruru (probably Rhyncholacis aff. linearis Tull.) growing on the rapids of the upper Rio Negro. © Beto Ricardo/ISA, 2012
JIQUITAIA
TRADITIONAL AND
CONTEMPORARY USES

Jiquitaia is strongly associated with the consumption of fish, the most important source of protein in the communities. It is estimated that each Baniwa family consumes on average 7 litres of jiquitaia a year.

Recently, this delicacy has been discovered and incorporated into the creativity of the Brazilian gastronomic circuit and its potential has been gradually revealed. New recipes appear on the internet every day. The first official tasting event, held in 2011 at the Dalva e Dito restaurant in São Paulo, brought together renowned chefs and gourmets under the coordination of chef Alex Atala. This created an important space for instigating the use of this and other Amazonian flavours in menus worldwide (Fraga, 2011). Since then, Baniwa pepper has appeared in salads, pasta, desserts, jams and chocolates, paired with fruits such as pineapple, mango and fresh cashew, fish and seafood, creams and purees, cured meats, drinks, becoming in fact a reference point in the sector for dried powdered pepper.

From left to right, chefs Felipe Schaedler, Bela Gil and, in the centre, Alex Atala, of the Instituto ATÁ, with Baniwa women of the Yamado community. © Beto Ricardo/ISA, 2015

Tucunarés (peacock bass) on the grill, Juivitera community, lake region of the middle Içana. © Beto Ricardo/ISA, 1997
Marinated pork with shoyu, Baniwa pepper, honey and ginger

Serves 1
Difficult

INGREDIENTS
- 200g pork belly
- 200ml stingless bee honey
- 350ml shoyu
- 45g grated ginger
- 3g Baniwa jiquitaia pepper
- 1 pineapple (cut into small diamond shaped pieces)
- 1 lime

PREPARATION
Mix all the items above and place in a vacuum bag (max vacuum). Steam the bag in the oven for 10 hours and 40 mins at 100°C. Open the vacuum bag, drain and save the juice. Toast the pork belly on the skin side with a drizzle of olive oil.

SERVING
Grill the opposite ends of each pineapple diamond and put aside. Cut the pork in half, lightly dipping it in the rest of the marinade and seasoning the meat with lemon to taste. Arrange the pork on the plate with the grilled skin upwards and a pineapple diamond alongside.

Grilled *pescada branca* with fish broth

Serves 2
Moderately difficult

INGREDIENTS
- 2 cleaned *pescadas brancas* (S. American silver croakers)
- 1 large white onion
- 5 black peppercorns
- 1 bay leaf
- 2 sweet green chili peppers
- 1 sweet red chili pepper
- 3g of Baniwa jiquitaia pepper
- Coriander to taste
- Manioc meal

PREPARATION
Place the fish and the peppercorns in a pan and cover with water. Leave on low heat without boiling for 35 minutes. Remove, sieve, separate the fish and put the broth to one side. Season the fish with salt and pepper.

Light the grill with 10cm of charcoal. When alight and glowing, place the fish and leave to grill over low fire without burning until toasted and dry.

Remove from the grill and put to one side. Roughly chop the peppers. Then carefully mix the broth with the fish and sweet peppers and allow to rest for two minutes to allow the flavours to mingle.

SERVING
Serve the fish and the broth in a deep bowl and sprinkle the Baniwa pepper. Garnish with coriander. Serve with *farinha d’água* (regional manioc meal).
Pasta with beans and sausage

Serves 1
Moderately difficult

INGREDIENTS

150g spaghetti
Olive oil and salt to taste
For the sauce:
120g red beans
110g Tuscan sausage
6ml corn oil
1 garlic head
¼ onion
Drizzle of extra virgin olive oil
Pinch of thyme
55g peeled tomatoes
BANIWA JIQUITAIA PEPPER to taste
Parsley to taste

PREPARATION

Cook the pasta in boiling water with a drizzle of olive oil and salt until it becomes al dente.
Sauce: boil the beans until fully cooked, but still whole.
Remove the skin of the sausage, sear and braise in the garlic and onion.
Add the tomato and thyme. Heat until the sauce thickens.

SERVING

Add the sauce to the cooked pasta. Arrange the pasta, beans and sausage, and parsley side by side on the plate. Finish by adding the Baniwa pepper.

Honey and pepper drink

Yields 1 glass
Preparation: 5 minutes
Easy

INGREDIENTS

1 spoon of honey
½ lemon
1 pinch BANIWA JIQUITAIA PEPPER or Cayenne pepper
1 glass of water

PREPARATION

Mix the ingredients together with a spoon.
Quinoa and pequi balls

Serves 4
Preparation: 1 hour 20 minutes Easy

INGREDIENTS
- cup quinoa or brown rice
- 4 sliced pequis
- ½ tea cup sea salt
- 1 cup cooked chickpeas
- soup spoons tahini or olive oil
- ¼ cup chopped parsley
- ¼ cup chopped spring onion
- pinches Baniwa jiquitaia pepper

PREPARATION
1. Cook the quinoa and pequi with the salt and two cups of water for 20 minutes (40 minutes if using brown rice);
2. In the blender mix the cooked chickpeas with the olive oil;
3. When the quinoa is ready, place in a bowl and add the chickpeas and remaining ingredients;
4. Shape into balls and bake in the oven at 185°C for 35 minutes.

Felipe Schaedler (Banzeiro restaurant, Manaus)

Tucumã and Yanomami mushroom broth

Serves 2

INGREDIENTS
- 300g tucumã
- 10g powdered Yanomami mushroom
- 20g butter
- 5g sugar
- 300ml water
- 20g tapioca flour
- 100g coriander*
- salt to taste
- lemon to taste
- Baniwa jiquitaia pepper to taste

PREPARATION
Mix the water and powdered mushroom and heat without allowing to boil. After 40 minutes, thicken with the tapioca flour. Check the salt and add some drops of lemon. Sieve the broth with a fine sieve and put to one side.
Reduce the broth by half, add the Baniwa pepper. Put to one side.
Heat the butter. When it is bubbling turn off heat and add the tucumã, toss gently and add the sugar. Serve the tossed tucumã in a bowl with dried coriander.

* To dry coriander, place leaves in the microwave for 30 seconds. Repeat 3 times until leaves are completely dry. Sieve and save for other recipes.

photo: © Sergio Coimbra/StudioSC
It was in 2005, at a meeting in São José do Içana of artisans responsible for the celebrated Baniwa arumã palm basketry, with the participation of ISA staff, that the idea emerged of finding new market niches for jiquitaia. The idea was to add another product to the “Arte Baniwa” label (WWW.ARTEBANIWA.ORG.BR), building on the infrastructure already in place for its production and marketing, reducing operational and administrative costs. Additionally, it would increase social benefits through the inclusion of an item produced by women, something that had become a priority in light of the demands of Baniwa women to participate in the Arte Baniwa project.

**MARKET**

Baniwa Jiquitaia Pepper on the shelf in São Paulo—in the Instituto Atâ stall at the Pinheiros market (above) and at the Casa Santa Luzia (below). Photos: © Beto Ricardo/ISA

Different jiquitaia colours in the local market of São Gabriel da Cachoeira. © Roberto Linsker/Terra Virgem, 2013

---

**Chibé with Amazon pineapple, ants and Baniwa pepper**

Serves 1

**INGREDIENTS**

- 50g pineapple brunoise
- 30g Uarini manioc meal
- 40ml water
- 10g red onion julienne
- 10g sweet chili pepper
- 15ml lemon juice
- 20ml olive oil
- 3g fleur de sel
- 5g (1 leaf) endive julienne
- *Baniwa jiquitaia pepper* to taste
- 2 ants

Beetroot shoots to taste

**PREPARATION**

Soak manioc meal in iced water. Put to one side.

In a bowl mix onion, sweet chilis (which should only be chopped now), lemon juice, pineapple, olive oil, salt, endive and Baniwa pepper. Mix well. Add soaked manioc meal.

**SERVING**

Garnish with ants and beetroot shoots. Serve cold.

---

photo: © Felipe Schaedler
The Baniwa Pepper initiative aims to strengthen an indigenous agricultural system by consolidating the value chain of one of the symbols of such a system: peppers produced by women in the forest and kitchen gardens of the Içana river basin.

It is the effort of a network of partnerships involving the Instituto Socioambiental, through a co-management agreement with various grassroots associations, schools and communities of the Içana River, part of the Alto Rio Negro Indigenous Land, which covers three million hectares of highly conserved rainforests in the state of Amazonas.

In line with the business plan (Lima, 2010), production capacity is designed so as not to generate demand pressures that alter community activities, by seeking a horizontal expansion of the productive base; that is, by incorporating more beneficiaries as the way to expand production rather than increasing individual workloads. To this end, the initiative is consolidating a network of Casas da Pimenta Baniwa across the traditional territory of this people, resulting in a growing improvement in their ability to supply this delicacy to markets in Brazil and abroad.

Jiquitaia was chosen because it was identified from the beginning as a product that aggregates not only the traditional knowledge of these people, but also market potential and a significant impact on family income and on the role of women in Baniwa society.

Baniwa Pepper already enjoys an excellent reputation in the local market, including São Gabriel da Cachoeira (Brazil), Mitu and San Felipe (Colombia), and San Carlos and Maroa (Venezuela). However, this is not always matched by fair trading relations that value the dedication and effort of the women involved in its production. Sold in plastic bags in the local market of São Gabriel da Cachoeira, unlabelled and with no producer credit, the price is less than a third of that obtained in special niches, such as the gastronomic market, which recognizes all its special attributes.

A growing concern throughout the Rio Negro basin around the lack of return from working one’s garden plots, in particular the economic devaluation of their produce, is that this discourages young people from maintaining this system, thereby compromising its security for future generations.

Over the last five years, ISA, Oibi and Foinh have promoted Baniwa pepper and the traditional agricultural system of the Rio Negro to chefs, especially through events and visits to São Gabriel da Cachoeira. The main achievement of the initiative has been to strengthen the Baniwa green economy through a sui generis model of access to fair markets for the products of indigenous agriculture, resulting in increased well-being and gender equity, social and organizational gains, conservation and valuing of biodiversity. This option has reduced the pressure to engage in prospecting and other illegal activities that degrade the environment and the quality of life in the Baniwa communities of the Içana River, by encouraging agricultural activities among young people and consolidating the Arte Baniwa brand as a collective heritage of the Baniwa of Brazil, Colombia and Venezuela.

CASAS DA PIMENTA

The “Casas da Pimenta Baniwa” form a network of buildings and management, offering spaces and utensils suitable for processing, packaging and storage of jiquitaia produced from the peppers grown by the women of the Baniwa communities. The Casas da Pimenta network plays an important role in establishing healthy and fair bridges between high socio-environmental value markets and the women producers of the indigenous communities.

The buildings were specially designed by architect Almir de Oliveira, following research on how the delicacy is processed, and on the aesthetic requirements and those of stability and sustainable use of materials in the traditional Baniwa buildings, as well as conformity with federal public health standards. The Casas da Pimenta are responsible for adding value to the production of family gardens, for quality control and for information flow to enable the full tracking of the production chain and its socio-environmental benefits.
By means of the lot number of each jar filled in the Casa da Pimenta, production managers can organize information such as: origin of production, lot size, name of the women participating in production of the lot and their communities, as well as varieties of peppers that were used.

The Casas da Pimenta are responsible for:
- aggregating the production of family gardens in a given area of Baniwa territory,
- organizing processing and storage, in accordance with the special protocol for production for the market,
- conducting quality control and the flow of information that allows full tracking of the chain and its social and environmental benefits.

The Casa da Pimenta Dzooroo, the first to be inaugurated, in 2013, is in Tunuí Cachoeira, the traditional territory of the Dzawinai phratry. Casa da Pimenta Manowadzaro, inaugurated in 2014, is in Ucuqui Cachoeira, the traditional territory of the Hoohodene phratry. Casa da Pimenta Pamáali and Casa da Pimenta Tsitisiadoa, inaugurated in 2015, are in the territory of the Waliperedakenai and in the multi-ethnic urban periphery of Gabriel da Cachoeira, in the Yamado community.
Third Casa da Pimenta, built by the EIBC-Pamáali school community, upper Rio Içana. © Carolina Morelli, 2015

Fourth Casa da Pimenta, built by the Yamado community on the outskirts of São Gabriel da Cachoeira. Marcelo Salazar/ISA, 2015

NETWORK OF CASAS DA PIMENTA BANIWA (as of April 2018)

- The Casa in the community of Nazaré is under completion.
- The Casa of the Yamado community faces the town of S. Gabriel da Cachoeira.
- The remaining communities with Casas da Pimenta are more or less 400 km from S. Gabriel da Cachoeira by river.
MANAGEMENT

These Casas da Pimenta operate through an agreed co-management protocol, under the supervision of the community and the relevant regional community association, as well as ISA and Oibi. Operationally, they function under the direct responsibility of a pair of production managers, necessarily a man and a woman.

The Casas da Pimenta Baniwa also have an important role to play in consolidating indigenous management and entrepreneurship centres that build healthy and fair bridges between the communities and markets of high social and environmental added value. They serve as a focus for bringing together and supporting a network of indigenous youth, women and managers, including non-indigenous partners, linked to important issues for the improvement of this product, such as the technological development of innovations that lead to the provision of other products of the traditional agricultural system of indigenous women of the Rio Negro identified in the business plan as having potential (LIMA, 2010).

THE PROJECT AND ITS PARTNERS

The project is implemented through a long-term partnership involving ISA (Instituto Socioambiental), Instituto ATÁ and Oibi (Indigenous Organization of the Içana Basin) and is managed through a Co-Management Agreement with several grassroots associations, schools and communities of the Içana River. From 2014, with the expansion phase of the Casas da Pimenta Network, it was also supported by the Instituto Bacuri and the Tides Foundation.

By the end of 2015 the project had about 30 commercial partners throughout the states of Amazonas, Roraima, Mato Grosso, Minas Gerais, Rio de Janeiro, São Paulo and the Federal District. (http://WWW.FACEBOOK.COM/PIMENTABANIWA). By then, along the Rio Içana there were 20 communities and 262 families benefiting from the income and experience generated by the production and sale of ten thousand jars of pepper.

The production, sales, and market value of Baniwa Pepper have been steadily increasing as new Casas da Pimenta are inaugurated and new business partners are involved. In 2015 the first export operation took place, to Amsterdam, opening the way for the inclusion of new international partners.

GLOSSARY

AATTI pepper
AWAKARONAI/YOOPINAI spirits of the forest
IIWI salt
JIQUITAIÁ tupi term for a powdered mixture of salt and pepper
KALIDZAMAI ritual blessing of food during the initiation of young men into adulthood
MITSIEDE (moquém) – small cooking platform for drying or smoking foods such as fish and peppers
ÑAPIRIKOLI mythical hero of the Baniwa people
WALIMANAÍ the human population currently inhabiting the world

NOTE REGARDING THE SPELLING AND PRONUNCIATION OF WORDS IN BANIWA
(adapted from Ramirez, 2001)

Henri Ramirez considers there to be three super-dialects in what he terms the Baniwa-Koripako language. These are the northern dialect, spoken by the Curripaco people of the upper Alto Rio Içana, the Rio Guainia and the headwaters of the Rio Cuiari; the central dialect, associated with the Içana (above the Assunção mission as far as the community of Matapi) and its Aiari and Cuiari tributaries; and the southern dialect, spoken in Victorino, on the Rio Guainia on the Venezuelan side of the border. Variations between the dialects do not impede mutual understanding by their speakers. In the present study we highlight in italics above all those terms of the central dialect associated with the clans of the Dzawinai, Hoohodene and Waliperedakenai phratries. The Baniwa alphabet comprises 20 phonemes – 4 vowels (a e i o) and 16 consonants (b d h k l m n ñ p r t ts dz tt y w):
- a and i are pronounced as in Portuguese;
- e pronunciation between the closed ‘e’ of ‘ele’ and the open ‘e’ of ‘ela’;
- o pronunciation between ‘u’ (as in ‘suco’ in Portuguese) and closed (as in ‘poço’);
- oo is pronounced ‘o’;
- p, t, k, b, d, m and n are pronounced as in Portuguese. However, t and d are never palatal; in other words, ‘ti’ ‘te’ ‘di’ e ‘de’ should not be pronounced like ‘tchi’ ‘tche’ ‘dji’ ou ‘dje’ in Portuguese;
- tt has a special pronunciation in Baniwa-Koripako; the sound is a type of t pronounced with the blade of the tongue firmly touching the upper teeth; compare the pronunciation of ita ´canoe´ (as in Portuguese) and ñita ´smoke´ or aatti ´pepper´ (with tongue on teeth);
- ts is pronounced as in English “cats”;
- dz is pronounced as in English “beds”;
- l pronunciation in between ‘l’ and ‘r’ in Portuguese;
- r is pronounced as ‘j’ in Portuguese, but in retroflex with the tip of the tongue bent backwards;
- h and y are pronounced as in the English ‘hat’, ‘water’ and ‘yes’;
- ñ as in the Portuguese ‘nh’ or the Spanish ‘ñ’;
- x pronounced as the ‘ch’ in the Portuguese ‘chapéu’.
SOURCES


PRESSE FRANCE. 2015. Estudo chinês indica que comida picante pode levar à longevidade.


Alex Atala / Instituto Âtâ

We chefs can do a lot to protect our biomes and cultures. A good example is Baniwa pepper. The result of an amazing project with the Baniwa community, this pepper bowled me over, along with other chefs across the world.

In addition to being extremely versatile, it is delicious, hot, but not long-lasting. It not only enhances the flavour of ingredients, but also offers a unique taste sensation.

Getting to know this pepper is more than a gastronomic experience, it is a cultural experience. By valuing it we are valuing one of the richest cultures of our country, albeit one almost unknown to us Brazilians – the culture of the Baniwa.

To discover and appreciate our flavours is to care for our biodiversity.

Baniwa Jiquitaia Pepper is a mixture of peppers (Capsicum spp.), organically cultivated by Baniwa women, in their forest and kitchen gardens of communities on the Içana River and its tributaries, then dried and ground with special salt. Production and distribution are organized by young indigenous managers, such as Graciela Brazão (photo), through a network of Casas da Pimenta being set up across the Baniwa territory.

For more information:
http://www.artebaniwa.org.br/
https://www.facebook.com/PimentaBaniwa/
E-mail: pimentabaniwa@gmail.com