

WHITE SONORA WHEAT DIRECTORY

WHERE TO BUY HAYDEN FLOUR MILLS WHITE SONORA FLOURS:

Hayden Flour Mills Online Store
HaydenFlourMills.com

Pane Bianco
4404 N Central Ave
Phoenix, AZ 85012

Phoenix Public Market Cafe
14 E Pierce St
Phoenix, AZ 85004

Musical Instrument Museum Cafe
4725 E. Mayo Boulevard
Phoenix, AZ 85050

All Arizona Whole Foods Markets

Bodega Market
7125 E 5th Ave Ste 16A
Scottsdale, Arizona 85251

Native Seeds/SEARCH Store
3061 N Campbell Ave
Tucson, AZ 85719

Gilbert Farmer's Market
222 N. Ash Drive
Gilbert, AZ 85234

Old Town Scottsdale Farmer's Market
Brown Ave, and 1st St
Scottsdale, AZ 85251

WHERE TO EAT WHITE SONORA WHEAT:

Phoenix

Pane Bianco
Pizzeria Bianco at Town and Country
Lon's at the Hermosa Inn
Litchfield's at the Wigwam
Tarbells
Crudo
The Breadfruit
Cafe Allegro @ MIM
Noca
The Welcome Diner
Gallo Blanco
Hanny's

Scottsdale

FnB
Il Bosco
Posh
Bourbon Steak
Pink Pony

Chandler / Gilbert

Liberty Market
Cork
Arizona Wilderness Brewing Company

Tempe / Mesa

Crepe Bar
24 Carrots
The Cutting Board Cafe
Top of the Rock

Tucson

Barrio Bread
Food For Ascension Café
Canyon Ranch Resort and Spa
Zona78
Cafe Botanica
Agustin Kitchen
Bavier's Bakery



Heritage Grains of the Desert Borderlands: Their Return to the Santa Cruz River Valley and to Your Table



Although many corn and small cereal varieties have contributed to the traditional and fusion cuisines of the Desert Borderlands, two stand out as so unique that they have been boarded onto the Slow Food International Ark of Taste. These two heritage grains—Chapalote flint corn and White Sonora soft bread wheat—are now the subject of an ambitious culinary recovery initiative in Southern Arizona. Their inclusion on the Ark of Taste suggests that they are historically significant to the cultural food traditions of this binational region. They are delicious, distinctive in their culinary uses, sustainably-produced, and are currently undergoing market recovery after having been endangered with extinction. A seven-member collaborative spearheaded by Native Seeds/SEARCH obtained a USDA Western SARE grant in late spring of 2012 to revive the production, milling, distribution, and marketing of Chapalote and White Sonora.

The resulting heritage grain alliance in the Desert Borderlands now includes a variety of players, including: Anson Mills, Avalon Organic Gardens & EcoVillage, Barrio Bread, Canelo Project, Community Food Bank of Southern Arizona, Cultivate Santa Cruz project of Local First Arizona,



Dos Cabeza Wineworks, Forever Yong Farm, Hayden Flour Mills, Native Seeds/SEARCH, Pizzeria Bianco, Ramona Farms, Sabores Sin Fronteras Foodways Alliance, Santa Cruz Valley Heritage Alliance, Southwest Center of the University of Arizona, Tubac Presidio State Historic Park, and Tucson Meet Yourself. Others are welcome to join us in this effort.

CHAPALOTE CORN

The oldest evidence of maize cultivation in the U.S. and adjacent Mexico comes from the Santa Cruz River Valley in southern Arizona and from near the Zuni and Hopi villages of northern Arizona. There, archaeologists have found prehistoric cobs of Chapalote corn that date from 4,100 to 4,200 years ago. In the Santa Cruz River Valley, Chapalote was prehistorically grown in fields along some of the oldest (3,200 years old) and most extensive irrigation canals anywhere in the New World. Chapalote therefore offers us a tangible taste of the history of one of the world's most important grain crops.

When maize historians compared Chapalote to other corns, they asserted that it was among the most distinctive heirloom corns in all of North America. Its most unique trait may be the deep chocolate brown kernels that often appear on its cigar-shaped cobs, for when ground, they offer a richly-colored, flinty corn meal unlike any other. Its use as a trail food in the form of finely-ground pinole has persisted in remote parts of the Sierra Madre in Northwestern Mexico until this day. Although ancient, Chapalote has the capacity to survive current climatic changes because it performs well even during relatively dry years. It is early-maturing, and needs little supplemental irrigation if planted with the first monsoon storms of the summer season.

Sometime between 1492 and 1952, Chapalote fell out of cultivation on the U.S. side of the Desert Borderlands, though it persisted less than 150 miles south of the border in the central Sonoran foothills of the Sierra Madre. It was not until around 1967 that New Mexican ethno-

botanist Vorsila Bohrer reintroduced Sinaloa-derived Chapalote seed to the U.S. Southwest. Later collections of Chapalote were made in Sinaloa by Native Seeds/SEARCH, and together with the descendants of Bohrer's seeds these form the foundation for current repatriation efforts in Arizona. Although once extinct north of the U.S./Mexico border, Chapalote is again being grown and tested by chefs in the region for polentas, corn breads, pinoles, atoles and tortillas.

The taste and texture of Chapalote have been given the highest ratings from Marco Bianco, the baker and pizza dough maker at the world-famous Pizzeria Bianco in Phoenix, who has made extraordinary polenta from the 2011 crop of Chapalote grown in the Santa Cruz River Valley. High in protein and fiber, low in fat and simple sugars, Chapalote corn is nutritionally superior to any GMO corn ever released, and to date has stayed free of contamination by GMO pollen.



WHITE SONORA WHEAT

Soft white bread wheat was introduced into North America by Catholic missionaries seeking to prepare communion wafers and feast breads for their congregations. Spanish and Italian missionaries to Mexico and the Southwest called this and other soft bread wheats "candeal." By 1640, candeal wheat had reached the Desert Borderlands, and the first variety to adapt well to this region was soon given the name "White Sonora." By 1740, White Sonora had become one of the two most prominent wheat varieties in Baja California, and it soon became the major staple crop of northwest Mexico, the U.S. Southwest and all of Alta California.

White Sonora's use extended beyond European-style breads and beers into Indian pinoles and atoles. By 1840, it had achieved the status of being the single-most favored grain for flour tortillas in Arizona, California and adjacent Mexico. Its plastic dough could be stretched long and thin into giant sobaquera tortillas, three feet in diameter! Filled with meats, beans or cheeses, these wheat tortillas helped create the now-famous burritos and chimichangas.

By the 19th century, White Sonora became Arizona's first export crop, grown by Pima Indian farmers and sent back along the Santa Fe Trail into the Midwest and East. During the Civil War, the Pima and their Hispanic neighbors produced and milled millions of pounds of White Sonora for long-distance trade, and their flour kept thousands of Yankee and Rebel troops from dying of hunger during the last years of that tragic conflict. But by 1870, the Pima farmers lost most of their irrigation supplies to recent immigrants to Arizona, and their irrigation ditches and wheat fields went dry. Commercial production of White Sonora declined among all desert cultures until the early 1960s, when most mills in the border states closed down.

However, White Sonora continued to be dry-farmed by a few farmers of mixed descent from Durango and Sonora to Arizona. They donated small samples of their remaining seed to CIMMYT and to Native Seeds/SEARCH, which

kept the seed stock alive for three more decades before sustainable agriculture projects and artisanal bakers once again took interest in it. Today, it has been reintroduced into cultivation among the Gila River Indian Community near Phoenix, and in the Santa Cruz River Valley near Tucson, where it will be the honored subject of festivals, conferences and photo exhibits beginning in the summer of 2012.



White Sonora wheat produces roundish grains which appear almost opaque. They are pale-colored with a blush of pink and grow in spikes that can be either barbed or weakly barbed. Remarkably, it is one of the few heirloom wheats in the U.S. that is resistant to both rust and a fungus known as Fusarium. For these reasons, White Sonora has survived where other wheat varieties historically succumbed to disease.

In addition to its rich history, disease resistance and drought tolerance, this heritage grain has belatedly been recognized for its superior culinary qualities. It has become highly-prized by bakers for both the sweet, earthy flavor and nutty texture of its flour, and by brewers for its fermentable and maltable wheat berries. When grown in the Santa Cruz Valley of Arizona, White Sonora produces a flour with relatively high protein content, but low gluten, making it palatable to some gluten-intolerant consumers.

This project was partially funded by a grant from the Western Sustainable Agriculture Research and Education Program. To learn more about this project, please visit www.nativeseeds.org or contact Chris Schmidt, at Native Seeds/SEARCH: cschmidt@nativeseeds.org • (866) 622-5561

