

# 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 *candéal*. By 1640, *candéal* 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 dryfarmed 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 was 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 barbless 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.

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