



# Wakayama Peach

**Elaborate Handworks**

**Generate Excellent Flavor**

**The Story of  
Wakayama  
Premium Foods**

Local People and Climate  
Vol.4

# The Largest Peach Production Area in Western Japan

## – With a History of Over 300 Years

Peach is one of the representative summer fruits. Covered in slightly reddish and velvety skin, it contains juicy, sweet and tender flesh.

Wakayama is proud of its largest shipment volume of peach in Western Japan.

Its major production area in Wakayama is the Naga region and the surrounding area, the middle basin of the Kinokawa River. Above all, the yield in Kinokawa City is about three-fourths of that in the whole prefectural area.

This area belongs to Setouchi Climatic Region, and it is relatively warm; the mean annual temperature is 16.9 degree Celsius, the annual precipitation is 1,130 mm and the annual hours of daylight are as long as 2,470.

With abundant water from the Kinokawa River and soil rich in organic matter and so on, various delicious agricultural products can be produced there. This area has a long and rich tradition of rice and fruit farming.

The peach production in Wakayama is said to have originated in Danshinden, Momoyama Town, Kinokawa City (formerly called “Arakawa Village”) during the Kanei and Genroku eras of the Edo period (1624-1704). According to “Wakan Sansai Zue”, an ancient encyclopedia published in 1712, the region was already well-known for its peach production in and out of Wakayama. The peach production in Momoyama Town has a rich history of over 300 years.

The major varieties of “*Arakawa no Momo*®” are ‘Hakuho’ and ‘Shimizu Hakuto’. They are characterized by slightly reddish color on the milky white skin, excellent flavor and texture, and long shelf life.

The farmers in Momoyama Town have elaborately produced high-quality peach, sorted fruit based on the stringent standard and promoted the distinctive flavor and texture. Thanks to these efforts, “*Arakawa no Momo*®” has been shipped all over Japan and highly evaluated.



‘Hakuho’, with a registered trademark “*Arakawa no Momo*®”, looks very elegant with the milky white and slightly reddish skin.



In the beginning of April, you can enjoy great scenery called “One look, One Hundred thousand peach trees” from the levee of the Kinokawa River. The blossoms filling the peach orchards look like pink fog. The slightly sweet fragrance wafts throughout the town.

In 2001, this scenery was registered as one of “100 fragrant landscapes” by Ministry of the Environment.





# Blessed with the Kinokawa River originating from Odaigahara

The Kinokawa River (the total length: 136 km) flows from Odaigahara, one of the highest rainfall areas in Japan, and runs through the center of the Kii Peninsula to the Kii Channel.

Before the early Meiji period (the 1870s), the Kinokawa flowed in its natural state and was much narrower than now. In ancient times, Arakawa District did not have a levee, and experienced flood from the river many times as the name of the district literally means (Arakawa means “violent river” in Japanese). The well-drained soil has been formed by the sedimentation of sandy soil carried by the river on its sand gravel.

Ordered by Yorinobu Tokugawa, the first feudal lord of the Kishu Domain (former name of Wakayama Prefecture), people started to cultivate the land of Arakawa District from 1624. After 1702, when the land survey was conducted, the levee named “Hanamidutsumi” which means “a levee to see blossoms” was built. The peach orchards formed great scenery with full blossom in spring, and it was named after this landscape.

After the Meiji period (1868-1912), the introduction of superior varieties and the improvement of cultivation skills made it possible to produce more attractive peach in terms of both quality and appearance, which leads to gain more popularity in the market. The production area spread to the neighboring villages out of the Kinokawa River area very rapidly. The peach production started in the hilly or mountainous areas and the fields converted from paddy fields.

The hilly or sloping area belongs to the Sanbagawa metamorphic belt, mainly composed of red soil. In these areas, the ripening season and fruit quality are different from those in sandy orchards on alluvial flats. As a result, it is possible to ship the same variety with different growing seasons for a long period. The farmers also chose the cultivar suitable to each production site, and began to produce various types.

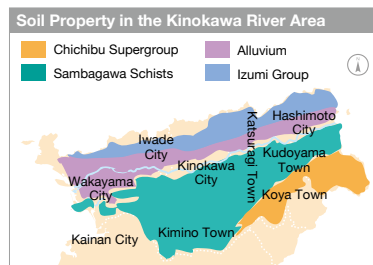
## Making Soil - Autumn to Spring

As a Japanese proverb says “planted peach and chestnut seeds take three years to bear fruit, persimmons take eight”, a peach tree starts to produce fruit more quickly, but its vigor is more likely to decline than other fruit trees. Making soil is a very important work in order to keep the tree vigorous and to produce high-quality fruits.

Therefore, farmers take an appropriate measure associated with soil and tree conditions in the orchard from autumn to winter.

Each farmer has an original method to make soil; deep plowing, using only organic fertilizer, applying self-made compost to the orchard, and so on.

Sandy soil in flat areas is very well-drained and suitable for producing peach. However, the moisture- and fertilizer-holding capacities of the soil are weak, and it is likely to cause the lack of fertilizer. Therefore, farmers must give enough fertilizer to the orchard. On the other hand, the original soil in the orchards converted from paddy fields is very nutritious. In such fields, the excessive amount of fertilizer results in over-vigorous, and farmers control tree vigor by leaving some branches intentionally in pruning.



## Pruning

Thinning branches is helpful to get optimal sunlight and wind through the tree and form its shape with high working efficiency. To produce excellent peach, it is important to decide which branch to prune or leave.

## Thinning Buds, Blossoms, and Fruitlets – Spring to Summer

Blessed with warm sunlight, the landscape of peach orchards full of deep pink blossoms matches the pleasant image of spring. Spring is a very important season for the farmers. They dedicate themselves to disbudding and deblossoming essential to make larger and sweeter fruits.

In general, one peach tree is said to have more than 20,000 buds. The extra buds and blossoms are gotten rid of in consideration of the variety and the age of each tree.

When the blightly colored blossoms start to bloom, artificial pollination is carried out.

Some peach varieties, such as ‘Kawanakajima Hakuto’, do not have pollens, so artificial pollination is indispensable to bear fruits. The pollens gathered from other trees are rubbed on the branches of pollen-free trees. Some farmers use a mist blower which sprays pollens, and others still work manually with tools such as feather dusters.



Thinning out green fruitlets is started at the end of May, and two to three times as many as the target amount of fruits are left. The extra buds and fruitlets are thinned out no less than four times.

Those who love beautiful peach blossoms are unwilling to remove buds and blossoms. In fact, the farmers used to leave buds and blossoms and thin out only fruitlets. The period of fruit enlargement has been moved forward possibly as a result of global

warming, and presently they have to remove not only fruitlets but also buds and blossoms.

## Bagging Each Fruit

After thinning out buds, blossoms and fruitlets, about 500 fruits remain on one peach tree. Furthermore, each fruit is bagged with a paper bag.

Fruit bagging prevents an oversight in thinning out fruitlets, protects fruits from strong wind and sunlight, and reduces the damage caused by harmful insects. In the past, the farmers made a paper bag from a sheet of newspaper or a telephone book. The use of a double-layer bag has become common to prevent sunlight more efficiently and make a fruit more colored. Besides, different paper bags are used according to the peach cultivar.

About one-fifth of bagged fruits lose their value because they fall in a strong wind and get scratched. In the end, the farmers harvest about 400 fruits which survived under the competitive circumstances from one peach tree.

Before harvest, the agricultural mulch is set in the orchards before harvest. This is the final work for the precious peach fruits. The silvery mulch prevents the infiltration of extra rainwater, and reflects the sunlight towards the fruits, contributing to make the fruits sweeter and more beautiful.



# Delivering Tasty Fruits

## Summer – Harvest

Every morning, the farmers start to harvest peach fruits before sunrise. They pick up ripe fruits on the tree by judging the degree of maturity by their color, tension, and hardness. As the ripe fruits are tender and fragile, they harvest one by one with their hands very carefully.

It is important to harvest fruits one day before getting ready to eat. They should be hard enough to go through sorting and transportation during one day of the distribution process.

Kinokawa City is famous for peach fruits grown outdoors and shipped early. The harvest starts with ‘Hanayome’, the extremely early ripening variety harvested from the middle to the end of June, followed by the popular ones shipped till the middle of August, such as ‘Hikawa Hakuho’, ‘Hakuho’, ‘Shimizu Hakuho’, and ‘Kawanakajima Hakuho’.

The fruit of each variety is harvested at the best period, and it is no longer than about 10 days for each one.

## Sorting Fruits

Peach fruits harvested from the early morning are carried to the packing house on the same day. They are sorted on a first in/out basis by the optical sorting machines with sensors which can measure sugar content and size at once.



If a fruit rolls or bumps into others, it gets damaged and causes the decrease of its commercial value. Therefore, it is dealt very carefully so as not to get rubbed. For instance, when it is carried on a conveyor, a bucket specially made for peach is used.

The criteria for sorting are set based on the classes to size and grades to distinguish the appearance (color, shape, scratch and so on).

## Elaborate Peach Production

Elaborate works and continuous efforts of farmers to improve the quality play an important role in producing excellent peach fruits. They dedicate themselves to every process, such as soil making, pruning, thinning buds, bagging fruits, harvesting, and so on.

“The more elaborately farmers work, the more delicious peaches should be.” They are worth eating.



## Shipping seasons of main peach cultivars

Month	June		July		August				
	mid	late	early	mid	late	early	mid	late	
	Hanayome								
		Hikawa Hakuho							
			Hakuho						
				Shimizu Hakuho					
					Kawanakajima Hakuho				

In Wakayama, various cultivars are successively harvested in their best season from the middle of June to the middle of August.

# Characteristics of Peach

## Peach Cultivars

Peach fruits in Wakayama get ripe earlier than those in the Kanto region. Taking advantage of this feature, early and medium ripening peach varieties are mainly produced there. Nowadays, the production volume of ‘Hakuho’ (medium-ripening) is the largest, followed by that of ‘Shimizu Hakuho’ (medium-ripening), ‘Hikawa Hakuho’ (early-ripening), and ‘Kawanakajima Hakuho’ (late-ripening).

The main cultivars of ‘Hakuho’ and ‘Shimizu Hakuho’ have milk-white skin. The farmers do their best to deliver safe and secure peach fruits to consumers by bagging them sincerely, making brightly pink color on the apex, reducing the damage from insects, and decreasing pesticide applications.

## Processed Foods

As peach fruits in Wakayama get ripe on the tree, they have an excellent aroma and taste well balanced between sweetness and sourness. People can enjoy this taste all year around with various processed foods; juice, liqueur, jam, jellied paste, and ice cream.

## Nutrition and Medicinal Benefits of Peach

Peach is rich in dietary fiber, and it has a function of intestinal regulation, such as curing diarrhea and constipation.

As for vitamins, it contains much niacin. Niacin plays an irreplaceable role in keeping skin and mucosa healthy. This substance is also good for excessive sensitivity to cold. Peach also contains rich potassium and other minerals, and is said to have a function to adjust blood pressure. It is also abundant in catechin, a kind of polyphenol.

The stone of peach is called “Tonin”, and is used as a herbal medicine for constipation, stiff shoulder, headache, high blood pressure, cerebral infarction, menoxenia, menstrual pain, and menopausal disorder. The blossoms of peach are called “Hakutoka”, and can be herbal medicines to discharge waste matters.

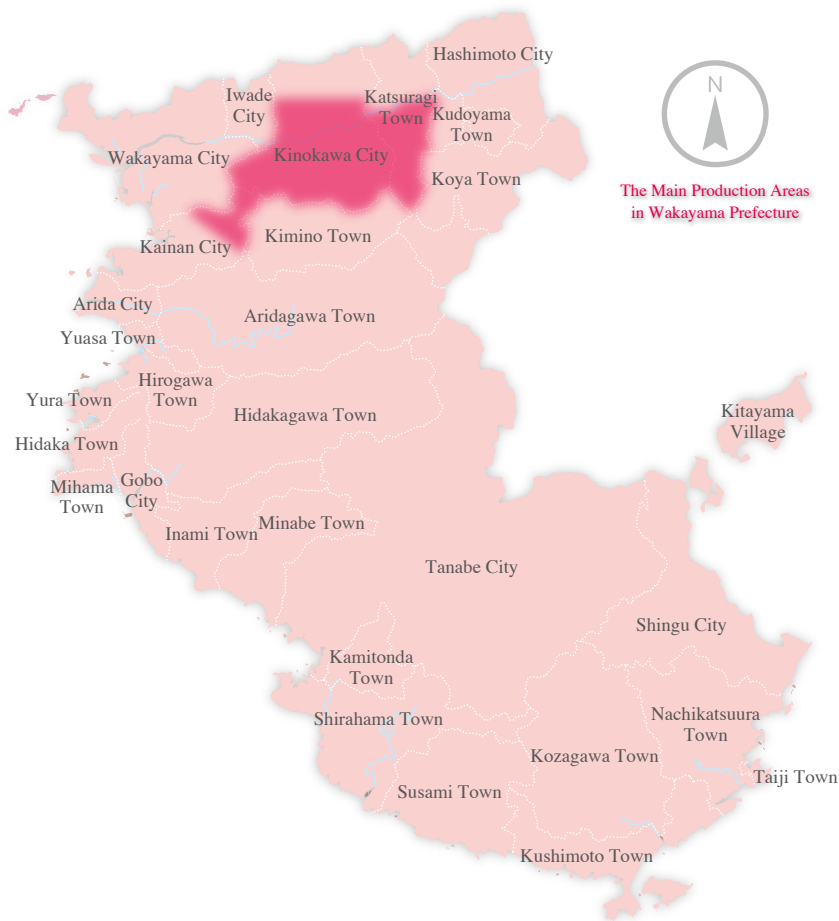
The leaves of peach contain substances, such as tannin and flavonoid, which can activate human skins. Bathing with peach leaves is called “Momoyu” and believed to be good for heat rash, skin eruption, bruise, and sprain.

## Farmers' Recommendation for Choosing Delicious Peach

<b>Color</b>	You should take lustrous one. It is better to avoid one with faded or yellow color because they are likely to have been harvested some days ago.
<b>Shape</b>	You should take ones that look slightly long from side to side when watched from above. The excellent ones are symmetric with their vertical suture.
<b>Size</b>	You should take larger one because they are likely to have been cared elaborately.

## Characteristics of Major Peach Varieties

Variety	Characteristics of Appearance	Characteristics of Flesh, Taste, and Texture
<b>Hanayome</b>	Short oval, Well-colored, Pink color	Fleshy texture, Juicy, Less acid, Sweet in spite of the extremely early ripening variety
<b>Hikawa Hakuho</b>	Completely circular, Well-colored, Likely to be colored pink as a whole, Deep red when ripened	Adequately hard and very juicy flesh, Less acid and enough sweetness
<b>Hakuho</b>	Beautiful shape, Bright pink, Rich flavor	White, dense and tender flesh without much fiber, Very juicy, Less acid and refined sweetness
<b>Shimizu Hakuho</b>	Completely circular, White and elegant, Milk-white skins even though ripened	Elegantly white, dense and tender flesh, Juicy, Less acid and enough sweetness
<b>Kawanakajima Hakuho</b>	Well-colored, Bright pink	White and hard flesh, Very red around the stone, Fleshy and firm texture, Enough sweetness and less acid, Rich taste, Long shelf life



The Main Production Areas  
in Wakayama Prefecture

### Calendar of Operations for Peach Cultivation

January	February	March	April	May	June	July	August	September	October	November	December
		Thinning Buds	Artificial Pollination	Thinning Fruitlets/ Regulation of Young Shoot Management	Bagging/ Mulching/ Removing Bags		Harvesting		Pruning in Summer Fertilization after Harvest	Basal Fertilization	Pruning

For More Information on Foods of Wakayama Prefecture...

#### Wakayama Specialties Online Catalog

<http://www.pref.wakayama.lg.jp/prefg/071700/database/dbtop.html>

#### Wakayama Intermediate Product Catalog

<http://www.pref.wakayama.lg.jp/prefg/071700/proc/index.html>

#### <Wakayama Specialty Shop in Tokyo>

Wakayama Kishikan <http://www.kishukan.com>

#### <Online Shopping>

#### Furusato Wakayama Waiwai Ichiba (Yahoo shopping)

<http://store.shopping.yahoo.co.jp/waiwai071700>

To inquire about foods of Wakayama...

#### Wakayama Prefecture

#### Agriculture, Forestry and Fisheries Department Food Promotion Division

<http://www.pref.wakayama.lg.jp/prefg/071700/index.html>