From Spring to Early Summer

Shincha harvest (the first tea of the year) usually starts at the beginning of May and continues for several weeks in Kyoto. The harvest season is the busiest time of the year.

In early spring, the weather starts to warm up just a little and the sky changes from winter's heavy and dark gray to spring's light and clear blue. Each year, tea farmers look forward to the harvest.

- **Fertilizing in Spring**

Tea farmers fertilize their crops about three times from the end of February to the beginning of May. Tea trees are fed with Organic fertilizers at the end of February or the beginning of March. Chemical fertilizer containing nitrogen, phosphoric acid, and potassium is applied in the middle of April. And ammonium sulfate fertilizer, which is nitrogen-based and rapid-acting, is applied at the beginning of May, which is just before harvest. Use of fertilizers is based on the timing of the harvest, with careful consideration of how long it takes each fertilizer to work. Organic fertilizers work slowly and ammonium sulfate fertilizer works fast.

Fertilizer is put around the base of tea trees

The old tea leaves have become a deep burnished green color. It is proof of tea tree absorbing enough nutrients

- **Pruning and Spring Bancha**

To prepare for the first harvest, tea trees are pruned in March. There are many varieties of Bancha, but the leaves collected in March are used to make Spring Bancha. Every year, the plants are pruned not only in March, but also in October. Tea trees pruned in spring sprout more vigorously than tea trees pruned in autumn; however, they can be harvested later. Farmers decide which trees should be pruned in autumn or spring, considering the geographic condition and breed of each tree, harvesting schedule, and so on.

- **Preparing to Harvest**

Twenty to thirty days before harvest, green tea trees for Gyokuro and Matcha are covered with special curtains. These curtains, called 'Kanreisha,' are used to shade tea trees from direct sunlight. Tea grown this way has a sweet and mild flavor, because without sunlight there will be few bitter tannins. Carefully grown in the shade for twenty days before harvesting, a cup of Gyokuro or Matcha has several unique features: an elegant aroma, a sweet taste and a light green color. Shading tea sprouts from the sun creates Theanine, a natural element that gives Gyokuro and Matcha a mellow taste.

Pictured here are the two different kinds of shading from sunlight: 'Tana' and 'Jikagise'. 'Tana' shades the tea trees from sunlight

by a canopy, whereas 'Jikagise' directly covers the tea trees. Both styles of covering used to be made from straw and reeds but are now made from high-tech, modern materials. To grow top quality Gyokuro and Matcha, tea leaves are covered with 'Tana.'
In contrast to Gyokuro and Matcha, tea leaves for Sencha are not covered. They are grown under full sunlight. Flooded with sunlight before harvest, a cup of Sencha has a deliciously bitter flavor, a refreshing aroma and a golden-green color.

Shaded from sunlight by way of 'Tana' before harvest.

Shaded from sunlight by way of 'Jikagise' before harvest.

Sencha tea farm before harvest. Not shaded.

- **Harvest**

  Harvest is the busiest time of the year for farmers. The best time to gather tea leaves is when the tea tree has three to five sprouts. The tea farmer must be careful not to pick the leaves that are too large or too small. If he gathers the leaves two to three days late, the tea's quality will be compromised. If he gathers the leaves too early, the amount will be too small. Therefore, the farmer must carefully ascertain the perfect time to harvest.

- **Picked by Skilled Hands vs. Trimmed by Machine**

  Today most tea leaves are trimmed by machine and traditional hand-picked Gyokuro, Sencha, and Matcha are rarely grown and therefore very precious. The flavor and aroma of hand-picked tea is much more mellow and smooth than tea trimmed by machine. Tea trees for hand-picked and for machine trimmed are grown in different ways, and tea sprouts of both types of trees grow differently. In the case of tea trees trimmed by machine, tea sprouts grow from the previously trimmed stubble. In contrast, in the case of tea trees picked by hand, tea sprouts shoot from the natural forks in the branches. The flavor and aroma of hand-picked tea is much more mellow and smooth than tea trimmed by machine and the leaves are of higher quality.
  Even a skilled tea harvester can hand pick just up to 6 to 8kg of fresh tea leaves all through the day. The picked fresh tea leaves are processed and finished, at which point the total weight of the tea leaves is only about 18% of the fresh tea leaves. Even if about 20 skilled tea harvesters pick all through the day, we can only gather around 25 kg of finished precious hand-picked tea. From the time the sprouts appear to the time the leaves become too large to harvest is just a few days. So tea leaves must be harvested as quickly as possible in one long stretch. Therefore it is never easy to pick large amounts of tea leaves by skilled hands in just a few days.
  Top grade tea, hand-picked Gyokuro, Sencha, and Matcha are grown only in quite a small amount, because there is only one small place in all of the world perfect for farming this special tea - a tiny area of land located right here in the Uji region of Japan. Therefore, hand-picked tea is very precious.

Tea leaves just before harvest.

Trimmed by machine.

Picked by skilled hands.

Tea sprouts for hand picked. Tea sprouts harvested by hand appear differently than those harvested by machine.

- **"Aracha" Processing**

"Aracha" Processing - Gyokuro and Sencha

After harvest, fresh tea leaves are processed the same day by the tea farmer. Processing steps are 1) Steaming, 2) Kneading, 3) Shaping, and 4) Drying. It usually takes about 4 hours to pass through all of the steps. Processed tea leaves are called "Aracha" and their weight is approximately one-fifth that of fresh tea leaves. The moisture content of fresh tea leaves is 80% whereas it is only 5% in Aracha.

This processing method was created by Sohen Nagatani in 1738 and then mechanized. Modern science now confirms that the cell walls of the tea leaves are broken down by this traditional kneading process, so that the beneficial nutrients naturally found in tea leaves can easily infuse into water.

1) Steaming

It is said that the Steaming step is the most difficult and requires the most skill and expertise, even though the steaming time is just 30 to 60 seconds. If tea leaves are steamed too heavily, the aroma characteristic of Sencha or Gyokuro is destroyed. On the contrary, if tea leaves are not steamed enough, the taste will not be good. In addition, whole tea leaves must be evenly and uniformly steamed, though tea leaves contain both soft baby spouts and large sprouts. Therefore, it is quite a difficult task. Farmers arrange the steaming temperature and time, considering the conditions of picked fresh tea leaves (thickness of tea leaves, softness, etc.).

2) Kneading

The kneading process is divided into three steps: rough kneading, contorting, and middle kneading. Steamed tea leaves are kneaded for 1.5 hours or more. At this point, the moisture content of the tea leaves is around 25%. During this process, the

moisture content should be uniformly removed from all tea leaves. If tea leaves are kneaded insufficiently or not equally, the flavor becomes cloudy and not fine. And if kneaded too much, the appearance of the tea leaves becomes whitish in color. In the case of processing competition grade tea, the tea master kneads the leaves for a shorter time than usual so that he can shape the leaves into the traditional sharp-pointed needle during the next shaping step. It requires much expertise and extremely high level technique.

3) Shaping

During the shaping process, tea leaves are shaped for about 1 hour. The end goal of this step is to create tea leaves shaped like a needle or bar. At this point, the moisture content of the tea leaves decreases from 25% to 12%.

4) Drying

Shaped tea leaves are dried for about one hour. At this point, the moisture content of the tea leaves decreases to 5% or 7%.

The Aracha process is now complete. As above, Aracha is processed by the farmer, but these tea leaves are not finished. The tea leaves are usually finished later by the wholesale merchant. Aracha is either sold directly to the wholesale merchant or bid on at the Kyoto Japan Agricultural Cooperative Association.

Tea leaves just coming out from steaming machine

Kneading machines

The temperature, moisture content of the tea leaves, air volume are carefully controlled in processing machine

Shaping machine

Tea leaves are shaped like a needle or bar

Drying machine

- **"Aracha" Processing - Tencha (Matcha)**

  Tea leaves which have not yet been ground into the fine powder of Matcha are known as Tencha.

  Fresh tea leaves are processed just after harvest. At the most, they should be processed within 24 hours after harvest. Tencha (Matcha) processing includes 1) Steaming, 2) Cooling down, 3) Drying, and 4) Cutting / Sorting. Matcha tea leaves before ground into powder are called Tencha.

  1) Steaming:

Fresh tea leaves just after harvest are steamed for 30 to 40 seconds. The steaming process stops oxidation (fermentation). Steaming temperature and steaming time should be adjusted by the condition of the tea leaves. The steaming process is one of the most important steps and determines the quality of the finished tea.

2) Cooling down:

Steamed tea leaves are quickly cooled by a strong blast of air. This fast cooling process extracts the aroma and bright color of tea leaves. Blown upward by the blast of air, the tea leaves soar upward about 6m (19.68ft).

3) Drying:

During this step, the tea leaves are dried in a fire pit. Inside of the fire pit is a three or four level structure, heated from underneath by a burner. The temperature of each layer is carefully controlled from 110 to 180C (230 to 356F). Before entering the fire pit, tea leaves are distributed evenly across a conveyor belt so that they dry consistently. There should be no overlap. Tea leaves pass through all levels of the fire pit to dry for about 20 minutes. This drying process determines the aroma and taste of Tencha (Matcha).

4) Cutting / Sorting:

After emerging from the fire pit, the tea leaves are cut and sorted to determine if they are dry enough. Thicker sections of the tea leaf such as stems and veins may not be completely dry, and are dried again in the fire pit. Finally, the cut and dry tea leaves are mixed thoroughly to ensure consistent quality and flavor. At this point, before Tencha is ground into Matcha powder, the tea is known as Aracha of Tencha.

Steaming process

Blown upward by a blast of air, the tea leaves soar upward about 6m (19.68ft) and are quickly cooled.

Tea leaves dry in a three or four level fire pit, heated from underneath by a burner.

The temperature inside the fire pit is carefully controlled.

Tea leaves emerging from the fire pit

Before Tencha is ground into Matcha powder, the tea is known as Aracha of Tencha.

- **Finishing**

Finishing - Gyokuro and Sencha

Aracha tea leaves go through two finishing processes: 1) Sorting and 2) Drying. During the sorting process, Aracha is sorted into standard tea leaves, non-standard tea leaves (larger size, old, or powdered tea leaves etc.), stems, and veins. The stems and veins sorted from high grade teas are called Karigane which is a good value and reasonable price.

During the drying process, the moisture content of the finished tea leaves becomes 3 to 4%. The moisture content of Aracha is 5 to 7%. The purpose of drying is to bring out the flavor and to enable the tea to keep in good condition long term.

Finishing - Tencha (Matcha)

Matcha tea leaves (Tencha) go through three finishing processes: 1) Sorting, 2) Drying, and 3) Grinding into fine powder. Tea leaves which have not yet been ground into the fine powder of Matcha are known as Tencha. After Tencha is ground into a powder, then it is known as Matcha. Tencha is ground with a stone mill. It takes one hour to grind 40g (1.41 oz) of top-quality Matcha with a stone mill. The result is a finely-textured powder. It is much better to grind Tencha into fine powder just before shipment to the customer in order to keep the fresh flavor and good condition. Of course, all of our Matcha is ground into fine powder just before shipment to our customers.

Grinding high quality Matcha

Stone mill

Traditional stone mill

- **Houjicha - Roasting**

The first three processing steps of Houjicha tea leaves are the same as for Sencha: 1) Steaming, 2) Drying and Crumpling, and 3) Shaping. But to make Houjicha, the tea goes through one special additional step: 4) Roasting. The unique toasted nutty flavor of Houjicha is created by roasting.

Like Sencha, tea leaves for Houjicha are grown in full sunlight, so that Houjicha contains beneficial Catechin. And since Houjicha is pan-roasted, it is very low in caffeine. In Japan, Houjicha is commonly given to babies and people who are sick because it is both nourishing and low in caffeine. Besides, Houjicha is perfect for iced tea. It will cool you on a sizzling hot day.

Roasting facility

Tea leaves sending up smoke in the roasting

Tea leaves just completed roasting

facility

- **Preserving**

  Freshness is one of Japanese green tea's most important qualities. Unlike dry oxidized teas such as black or oolong, it does not last forever! Therefore, Japanese green tea needs to be stored carefully to preserve it's essential freshness.

  "Aracha" tea leaves, just after harvest and processing by farmers, are brought to the factory. "Aracha" tea leaves are finished: sorted, dried, blended, and on so on. Then they are vacuum packed in 20kg (44.1lb) bags, and stored in a special cold storage chamber. Temperature in the cold storage chamber is kept at 0C (32F) to 5C (41F) throughout the year.

  The finished tea leaves are repackaged into smaller size bags just before shipment to our customers around the world. The remaining tea leaves are vacuum packed and stored in the cold storage chamber again. The smaller size bags are packaged with nitrogen in order to keep the tea in good condition even during international delivery.

  The harvest season is the busiest time of year not only for farmers but also for the factory. All "Aracha" tea leaves can't be finished at one time. In fact, more than half of the unfinished "Aracha" tea leaves are vacuum packed and stored in the cold storage chamber until after the busy harvest season is over.

Packaging in 20kg vacuum sealed bags

Cold storage chamber

Inside of cold storage chamber

- **Shincha**

  Tea gathered in April and May is called 'Ichibancha,' meaning new tea or first tea of the year. In the Spring, the land is most fertile and that gives Ichibancha the best flavor. Japanese green tea is usually harvested between two and five times each year from Spring to Autumn. But the first pick, Ichibancha, is by far the best.

  Similar to the Beaujolais Nouveau of French wine, the name Shincha celebrates the first tea harvest of the year. However, not all Ichibancha is Shincha. Only the Ichibancha which is sold specifically in celebration of the first pick of the year is called Shincha. Sencha's aroma is the best just after harvesting. Shincha Sencha is very delicious.

Summer

The summer in Kyoto is extremely hot and humid. Summer tea farm work is very severe and hard.

- **Pruning after Harvesting Shincha**

  As soon as we finish harvesting the Shincha, we begin pruning the tea trees. There are two different ways to prune according to different needs.

The first way is in order for tea trees to stop growing and rest. In this case, tea trees are more deeply pruned. Most of the tea leaves are pruned away, so the trees almost stop their photosynthesis and stop growing. In this way, the tea trees can rest. The benefit of this way is less strain on the tea trees and the expectation of a good harvest for the next season. However, in this case, tea leaves are harvested only one time in the year, so this is a luxury.

The second way is used for preparing Nibancha, the second harvest of the year. In this case, the tea trees are pruned just a little. It is possible to process these pruned tea leaves into premium grade Houjicha, which is made from Ichibancha, the first harvest of the year. Even Houjicha made from Ichibancha, premium grade Houjicha, can be made from tea leaves only after the harvest of high grade Sencha, which has an excellent refreshing aroma. Only about five percent of Houjicha is made in this way and can therefore be considered to be premium grade Houjicha. Hibiki-an's Houjicha is premium grade and is made in this way.



- **Nibancha**

The second tea harvest of the year, Nibancha, is harvested from the end of June to the end of July in Uji, Kyoto. In Uji, tea leaves can be harvested up to Nibancha, the second harvest, though teas in Shizuoka or Kagoshima can be harvested up to Sanbancha, the third harvest or Yonbancha, the fourth harvest. It depends on the climate.

Generally speaking, Nibancha harvested in June or July has a less smooth, mellow taste and subtle aroma than Ichibancha, the first tea of the year. In contrast, Ichibancha, which slowly and thoroughly absorbs the nutrients from the previous autumn and through winter until spring, tea leaves for Nibancha grow quickly just after the first harvest in May for only about a month and a half. Sanbancha, the third harvest grown in Shizuoka and Kagoshima, is much less flavorful. Like Ichibancha, there are many good quality Nibancha teas. To produce two tea crops, Ichibancha and Nibancha, the tea trees must be healthy and the tea farm must be properly managed.

June and July is rainy season in Japan, so the weather is extremely hot and humid, therefore the Nibancha harvest is not only difficult for tea trees but also for farmers. However, Nibancha is an important source of income for farmers.

And insects, who like eating tea leaves, swing into action in June. In rainy season the sun is blazing hot and the air is damp with humidity and the conditions along with the plentiful fertilizer fed to the tea plants creates favorable conditions not only for the tea plants, but for weeds as well. Farmers must struggle with weeds. Farmers must take defensive action to protect their tea trees, in order for the Nibancha tea leaves to survive the attack by insects in summer.



- **The Struggle with Harmful Insects and Disease**

In Japan, the rainy season called TSUYU is in June and July. Harmful insects start buzzing around the tea farm, late in the rainy season. This is also a critical time for tea farmers to take care to prevent tea tree diseases.

Autumn is the season when the most amount of fertilizer is fed to the tea trees. If tea trees are not healthy in autumn due to damage by harmful insects or disease, the tea trees can't absorb enough of the nutrition of fertilizer, and unhealthy tea trees will not produce a good crop next spring. Therefore, farmers must struggle with harmful insects and disease in July and August in order to keep tea trees healthy. The work under the hot sun in mid-summer is extremely hard labor, but necessary to keep the tea trees in good health.

It is said that there are a hundred or more kinds of harmful insects. They are divided into roughly three categories: MAKI MUSHI (rolling insect), UNKA (mosquito), and HADANI (mite).

It is said that tea tree diseases are caused by bacteria or viruses that attack trees and plants. TANSO and MOCHI are common diseases that we must avoid. As you can see in the images below, the diseases look quite bad, which is why we at Hibiki-an take great care to prevent them. Of course, these tree diseases are not harmful to humans.

Tea farmers frequently check their crops to see if any problem is developing, and if so, they must immediately take appropriate action. To prevent and exterminate harmful insects and diseases, farmers sometimes use mild chemicals. Needless to say, because the concentration standard of residual agricultural chemicals in Japan is the toughest in the world, chemicals are strictly controlled and used cautiously and sparingly.

Much more strict management for preventing harmful insects and diseases is required for hand-picked tea which is the highest grade. As you know, tea trees for hand-picked tea and for machine-trimmed tea are grown in different ways, and tea sprouts of both types of trees grow differently. (For more information, click here.) If tea leaves of tea trees for hand-picked tea are damaged once, new sprouts will immediately appear from the root of the damaged tea leaves, and the sprouts will be a branch. Under ideal conditions, tea trees for hand-picked tea should grow straight upward without any branches. Therefore, farmers must check the tea leaves for hand-picked tea almost every day.

Above is one of the reasons why hand-picked tea requires enormous efforts by the farmer to create the excellent flavor.

MAKI MUSHI (rolling insect) rolls tea leaves roundly and is resident in it..

Lime green color tea leaves, in the center of the picture, are damaged by UNKA (mosquito).

MIKAN TOGE KONAJIRAMI on the underside of tea leaves.

Brown color parts are damaged by TANSO disease.

Tea leaves damaged by MOCHI disease.

After rain, it is not unusual to see frogs at the tea farm. The frog eats many insects and is therefore very beneficial to the tea farm ecosystem.

Tea tree for hand-picked tea. It is sprouting a new branch from a damaged area.

Tea trees for hand-picked tea under ideal conditions. They grow straight upward without any branches.

Chemical dissemination.

- **Our Organic Tea Farm in the Summer Season**

  Bugs start to rush around with vivacity in June. The brown portions of tea leaves shown in the picture have been eaten by harmful insects. In contrast, the tea leaves on the right side picture taken at a non-organic tea farm at the same time have not really been eaten by harmful insects. These brown portions of tea leaf ruin the tea's excellent taste and aroma, so of course we do not use these portions in our tea.

  But fortunately, spiders and other insects come to the rescue to prevent our special Organic teas from being damaged. You can see

a spider's web among the tea trees on the Organic tea farm. Spiders, lizards, mantis, and ladybugs are natural enemies of harmful insects, and they carry out important duties on the Organic tea farm. When a non-organic tea farm is changed to an Organic tea farm, the natural enemies begin thriving in the area about 3 years later.

Second harvests start around the beginning of July. Farmers at non-organic tea farms feed chemical fertilizers just before the second harvest in order to expedite the second sprouts to grow quickly and lighten the tea trees' burden. However Organic tea trees cannot be fed chemical fertilizers. So, the second sprouts grow much slower than non-organic.

We, Hibiki-an, don't harvest a second Organic crop at all, so all the Organic tea you enjoy is from the first harvest, which is the best anyway. We do this in order to lighten the Organic tea trees' burden without using chemical fertilizers. It naturally brings out an excellent taste and aroma for next year's harvest.

Rampant weeds grow close together at Organic tea farms in the summer season. Farmers must pull up the weeds day after day. It is the hardest work at an Organic tea farm. There is a special saying here in Japan that refers to this situation: "Daichi tono Kakuto" which means that farmers must struggle with mother earth. But through this struggle we are able to bring you some of the finest Organic green tea available in the world!

Organic tea farm in July

Non-organic tea farm in July

Organic tea undamaged by harmful insects

Spider's web among the tea trees on the Organic tea farm

Mantis on the Organic tea farm

Rampant weeds growing close together

- **The Struggle with Weeds**

In the tea region of Uji during the long summer months, the sun is blazing hot and the air is damp with humidity. These conditions along with the plentiful fertilizer fed to the tea plants creates favorable conditions not only for the tea plants, but for weeds as well. For weeds, a tea farm in the summer season is a very comfortable environment indeed.

The pictures below are typical weeds that farmers must struggle with. The picture on the left side is a vine plant. It is a hassle to pluck vines away from the tea trees because long vines insistently entwine with the tea trees. The right side of the picture is the foliage of the vines entwining with the tea trees. To the right of that is a picture of a felon herb at the tea farm. Again, to the right

of that is a type of fern.

Most weeding work is done not by machine but by the hands of farmers. The tea farm under the scorching sun is like a sauna bath. It is a struggle with mother earth, but a struggle with wonderful rewards.

Autumn will come soon. Farmers work many long hours in the tea farm in late summer and autumn.

The right side of the picture is the foliage of the vines entwining with the tea trees.

Felon herbs at the tea farm

A type of fern

Autumn

Autumn is a critical season for tea farmers. Tea trees grow best in autumn and thus farmers work diligently to enrich the soil in late summer and early autumn. This work promotes new root growth production in tea plants. The work includes enriching the soil by adjusting soil pH to the proper acid levels, soil aeration by deep mechanical tillage, and application of autumn tea plant nutrients.

- **Adjusting Soil pH and Aeration**

The soil in Japan is naturally acidic and fertilizing makes it more so. Tea bushes are acid soil absorbing plants. It is necessary to adjust the soil acidity to the appropriate pH. To adjust acidity, farmers distribute lime between tea trees, then disk or cultivate the lime deep into the soil.

Deep tillage not only works the lime into the substrate soils, but also aerates the soil to promote a fresh environment for a new stronger root system to develop. The aeration also allows air, water, and nutrients to reach the new root system. A tillage machine cultivates the soil about 12 inches (30 cm) deep. Once the soil is treated and aerated the tea tree roots grow rapidly and produce small hair like roots. The care and nurturing of the tea plantation is vital during the autumn season because it ensures the well being of the tree and the future of tea production and ultimately the quality of the tea produced for your green tea enjoyment.

Post lime distribution | Tillage machine use | Post tillage results

- **Fertilizing in Autumn**

  Roots of tea trees grow best in autumn, so it is very important for farmers to fertilize during the autumn season. Generally they use eight to fifteen varieties of fertilizer about ten times per year. Most farmers fertilize mainly (30 to 40 percent of the annual amount) in the autumn so that the fertilizer can slowly enrich the soil over a period of six months.

  Ichibancha, the first harvest of tea, is higher in quality than Nibancha, the second harvest and Sanbancha, the third harvest because Ichibancha fully absorbs the nourishment of the fertilizer which was applied the previous autumn.

  The fertilizer is comprised mainly of rapeseed, cotton husks, fish, calcium minerals, and other natural nutrients and elements which make the soil healthy.

  (Fertilizing at Organic Tea Farm)

  All fertilizer for Organic tea farms must be certified by an Organic certification organization. Of course, chemical fertilizers or genetically modified fertilizers are not certified. Even the constituents and the production processes are closely examined to receive Organic certification from the Organic certification organization. It is not easy work for Organic tea farmers just to purchase certified fertilizer.

Fertilizer certified by the Organic certification organization

The geographic region best for high grade Sencha production is a mountain ravine. So it is not easy work even just to carry fertilizer on the sloping ground.

Feeding Fertilizer

- **(Fertilizing at Gyokuro and Matcha Tea Farm)**

  Tea trees for Gyokuro and Matcha are fertilized three times as much as other kinds of tea, such as Sencha, in order to create the characteristic deep sweet taste. Please see the pictures below from a Gyokuro tea farm where the tea trees are fed about three times the usual amount of fertilizer as well as another tea farm.



- **Pruning**

To prepare for next year's harvest, tea trees are pruned in October to November. There are many varieties of Bancha, but the leaves collected in October are used to make Autumn Bancha. Tea leaves for Bancha (Houjicha) are fully flooded with sunlight, so that Autumn Bancha contains much Catechin that is created by trees flooded with sunlight.

Farmers prune in order to prevent sprouts from being mixed in with old leaves during the harvest. If pruned too early, tea trees will push out new shoots and they deteriorate and cause injury to the tea tree during the cold winter months. And if pruned too late, tea trees push out new sprouts late in the next spring. Therefore farmers carefully schedule the time for tea tree pruning.

Pruning

The right side of the picture are tea trees that just have been pruned, and the left side is tea trees that are about to be pruned.

Recently pruned tea trees

- **The Flower of Japanese Green Tea**

The flowers of Japanese green tea bloom in the latter part of autumn. The flower color is white and yellow, and has a beautiful simplicity. It is said that when the flowers of Japanese green tea bloom well in the autumn, the next winter comes with a lot of snow.



- **Kuradashi Gyokuro**

In contrast to Sencha, which is enjoyed for its refreshing aroma immediately after harvest, Gyokuro also gains an enriched flavor

over time, and so is best some months after harvest. A long time ago, people celebrated aged Gyokuro as the "Shincha of Gyokuro" in autumn. It was called "Kuradashi Gyokuro" which means Gyokuro taken out from the granary.
Present storage techniques enable tea farmers to keep tea leaves fresh for one full year. However today's Gyokuro lovers also tend to look for Kuradashi Gyokuro enriched by time.



Winter

- **Preparing for Winter**

  To keep the tea trees warm in winter, farmers cover the ground around the tea trees with dried grass, fallen leaves, straw, and so on. They help to keep temperature and humidity in the soil around the tea tree roots. They also help to keep moisture in soil, and become good fertilizer over time. Young tea trees around 0 to 5 years old are especially cared for elaborately because they should be protected well from cold and dry weather. These efforts, which are not easy, prevent tea trees from freeze and frost injury and other diseases in the winter season.


Dry straw among young tea trees


Dry leaves and dry bamboo


Rice husks retain heat and moisture very well

- **Tea Trees in Winter**

  During the long, cold winter months, tea trees are dormant as though they are hibernating. In that time, tea trees store nutrition in order to sprout vigorously in the spring. Both tea farmers and tea trees look forward to the coming of spring.

- **Snowy Day**

  We do have some snowy winter days in the Uji region, although snow does not usually accumulate. Even if snow accumulates, it is generally less than 10cm (4 inches) in depth. The tea trees rest patiently waiting for the spring during these snowy days too.
  In the extremely rare case that snow accumulates over 20cm (8 inches) in depth, tea trees for hand-picked tea could be damaged under the weight of the snow. In this case, the farmer must carefully brush the snow from each tea tree. Tea trees trimmed by machine are not damaged by the weight of accumulated snow because of the branch formation.

- **Winter Tea Farm Work**

  During the cold winter months, the roots and leaves of the tea trees hardly grow at all. Tea trees save up nutritional elements from the fertilizer which they received last autumn, so they wait and make ready to grow vigorously in the spring.

  In order to survive winter safely, farmers have to take special care of young trees under four years old. For example, if the ground temperature at the tea farm becomes very cold, farmers put dry straw or other protection from cold around the base of the young trees. However, the main work for farmers in the winter season is the preparation of Organic fertilizer or readying the ground for a new tea farm, and taking care of other projects to help the farm run more efficiently. Farmers can complete these necessary tasks only during the winter season.

Young tea trees protected from cold with dry straw

Creating new tea farm

Improving water facilities at the tea farm

Breeds of Japanese Green Tea

Below are the features of the main breeds of Japanese green tea along with each corresponding tea sold at our tea shop.

- **Gokoh**

  This breed has a noble taste and aroma that is suitable for Gyokuro. It has a characteristically sweet taste. The color of the tea which these leaves brew is a noble shade of green. Gokoh is slow to ripen. It is grown only in small amounts mainly in the Uji region in Kyoto.

  ('Gyokuro Super Premium' , ' Gyokuro Premium' , ' Organic Gyokuro' , and ' Gyokuro Karigane Premium')

- **Samidori**

  This breed has a noble taste and aroma suitable for both Gyokuro and Matcha. It has a characteristically sweet taste. The color of the tea which these leaves brew is a noble shade of green. The green color is a little more yellow than Gokoh's color. Samidori is slow to ripen. It is grown only in small amounts mainly in the Uji region in Kyoto.

- **Asahi**

  This breed has a natural subtle flavor and elegant aroma suitable for Matcha. Asahi breed tea is frequently awarded first place in the Matcha category of the National Tea Competition. Asahi is early to ripen. It is grown only in small quantities mainly in the Uji region of Kyoto.

- **Yabukita**

  This breed has a rich taste and refreshing aroma. It is an excellent breed, because it is hardy and highly productive. In Japan, Yabukita is grown on 80% of tea farms.

  ('Sencha Super Premium' , 'Sencha Premium' , 'Organic Sencha' , and other many items)

- **Asatsuyu**

  This breed has a unique rich taste. The color of the tea which these leaves brew is a deep shade of green. Asatsuyu is also known as 'Natural Gyokuro.'

- **Saemidori**

  Saemidori is a crossbreed of Yabukita and Asatsuyu, so the aroma is superior to Asatsuyu. It is a new breed that is expected to be grown on many farms across Japan in the future. It is also known to be an early-ripening breed. The plant can only be harvested for a short amount of time and only produces a small amount of tea. Because of this, farmers can only grow a small amount of this precious tea.

  ('Sencha Fukamushi Super Premium')

- **Sayamakaori**

  Sayamakaori is a sturdy and vigorous tea tree that produces green tea with a strong taste and aroma. It is an excellent breed, because it is so healthy and hardy, and also it is highly productive.

- **Okumidori**

  This breed has a taste and aroma similar to Yabukita. The water color of this breed is near noble green like Gyokuro of Gokoh breed.

  Okumidori ripens slowly, so farmers grow this breed together with Yabukita to delay the suitable harvest timing. In this way, tea may be harvested throughout the entire tea-harvesting season.

Why is the tea produced in Uji in Kyoto so envied?

The tea produced in Uji in Kyoto has a much deeper taste and aroma and a more noble color than the tea produced in any other region of Japan. Among tea farmers and leaders in the tea industry, Uji in the Kyoto region is envied as an exceptional presence. What is the reason for this?

- **The birth place of Japanese tea**

  When the Buddhist monk, Eisai popularized the idea of tea drinking around A.C.1191, farmers began growing tea leaves in Uji in Kyoto. Sohen Nagatani also developed the Japanese tea processing method that is standard today in Ujitawara in the Uji region around A.C. 1738. Everyone agrees that this process makes the best-tasting tea.

- **The geographical features**

  The Uji region in Kyoto, especially Ujitawara, is surrounded by lush green rolling hills. The misty climate, sloping hills, warm days and cool nights provide an ideal setting for plants to thrive. These geographical features and the nutrient-rich soil in Uji produce a very high grade of Japanese green tea.

- **The accumulation of tea cultures**

  Kyoto was the capital of Japan for over one-thousand years, so the tea ceremony, the tea ware industry, and Japanese tea culture developed centrally in Kyoto. Shizuoka or Tokyo has historically tended to brew tea in haste. In contrast, people in Kyoto have tended to enjoy not only the finished product, but the slow and graceful process of brewing a perfect cup of tea. People in Kyoto also take time to appreciate the tea ware and the presentation of the tea - the beautiful green color and the wonderful fresh smell of a great cup of tea.

  For many years, Uji has been the only region in Japan where all kinds of high grade tea including Matcha, Gyokuro, and Sencha have been produced. Throughout history, farmers in this region have grown high grade tea with loving care, so the methods, soil quality, and breeds of tea have been perfected over time. In the last few years, the Japanese tea industry has improved processing, preserving, and marketing techniques, which have helped to preserve the essential flavor and freshness of Japanese green tea from the farm to the customer so that people around the world can enjoy a fresh cup of high grade Matcha, Gyokuro, or Sencha.

The birth house of Sohen Nagarani.

A tea farm surrounded by rolling hills in Ujitawara

Kyoto is the place historically accumulated the whole of Japanese tea culture

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Concentration Standard of Residual Agricultural Chemicals in Japan

1. Concentration Standard of Residual Agricultural Chemicals in Japan

The Concentration Standard of Residual Agricultural Chemicals in the European Union (EU) may be the strictest in the world. It is said that thanks to the enormous efforts of the Kyoto Green Tea Cooperative Society and the whole tea industry in Kyoto, where Uji (and Hibiki-an) is located, almost all of the tea leaves produced in Kyoto have met the EU Concentration Standard of Residual Agricultural Chemicals since 2003.

Japan has one of the most strict safety standards for agricultural chemicals anywhere in the world. In addition, the quality of agricultural chemicals made in Japan is very high. In 2006, the standards became even more stringent, when the Ministry of Agriculture, Forestry and Fisheries of Japan established the Positive System of Agricultural Chemicals. The Positive System of Agricultural Chemicals limits the kinds, quantity, and timing of when farmers can use agricultural chemicals, and compels farmers

to meticulously record when, what kind, and how much they use. As a result, Japan's crops have one of the lowest levels of residual agricultural chemicals anywhere in the world.

Of course, all of the green teas sold and produced here at Hibiki-an meet or exceed these strict standards.

2. Achievements of Agricultural Chemicals

Agricultural chemicals have brought a great deal of progress for modern agriculture. It has reduced farmers' burden and increased crop yields. For example, in the case of rice production, in 1949, farmers spent 50 hours weeding out of every 10 hours at the paddy. But in 1999, farmers spent only 2 hours out of every 10 by using chemicals and machines. If we did not use chemicals at all, it is said that the rice crop yields would decrease 28% and that the apple crop yields would decrease 97%. ("Agricultural Chemical Survey" 2007. Japan Epidemic Prevention Incorporated Association.)

3. Pesticide Application

Incidence of harmful insects and diseases relates closely with temperature and humidity. Harmful insects and diseases appear actively from July to September. Therefore, pesticides are applied usually one or two times in March and April just before harvest, and four to six times in July to September.

4. Residual Agricultural Chemicals and History of Chemical Improvements

Pesticide effectively gets rid of insects at the tea farm at the time of application. However, insects which come from outside the farm a few days later will survive. Constituents in the chemical are degraded by sunlight, temperature, air, water, and so on, and the chemical is completely safe after a few days.

Indeed, highly toxic and residual agricultural chemicals were extensively used from around 1950 to 1970 in the world because of the societal demand for increased food production. However, after that time, agricultural chemicals were developed with a special focus on being low and non-toxic. Today, agricultural chemicals have been developed to be safer with less burden on the environment, and a more effective outcome. These agricultural chemicals target certain harmful insects and ensure the safety of humans and the environment at the same time.

5. Efforts of Tea Farmers

The Positive System of Agricultural Chemicals limits the kind, quantity, and timing of when farmers can use agricultural chemicals, and compels farmers to meticulously record when, what kind, and how much they use.

6. Safety of Japanese Tea

As a result of the efforts above, it is said that Japanese tea is ensured the following safety level: "Even if Japanese tea is drank every day in a human's entire life, it causes no harm at all." In other words, Japanese tea is 100% safe to drink every day. All of the criterion values of the Concentration Standard of Residual Agricultural Chemicals in Japan are designed based on this level of safety.