

(12) **United States Plant Patent**
Lim et al.

(10) **Patent No.:** **US PP12,320 P2**
(45) **Date of Patent:** **Jan. 1, 2002**

(54) **PEACH TREE NAMED ‘MOONSU’**

(75) Inventors: **Jung-Kyoung Lim; Hyang-Hee Lim,**
both of 637-1 Woulhari, Seomyun,
Yunkikun, Chungnam (KR)

(73) Assignees: **Jung-Kyoung Lim; Hyang-Hee Lim,**
both of Chungnam (KR)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/217,790**

(22) Filed: **Dec. 21, 1998**

(51) **Int. Cl.⁷** **A01H 5/00**

(52) **U.S. Cl.** **Plt./195**

(58) **Field of Search** **Plt./195**

Primary Examiner—Bruce R. Campell
Assistant Examiner—Melissa L. Kimball

(74) *Attorney, Agent, or Firm*—Pepper Hamilton, L.L.P.;
Gilberto M. Villacorta

(57) **ABSTRACT**

A new and distinct variety of peach ‘*Prunus persica*’ tree with the following combination of unique features that are desirable in a new variety.

1. Heavy and regular production of fruit.
2. Production of very firm, white flesh fruit with good handling and shipping quality.
3. Fruit that will stay firm on the tree 10 to 17 days after maturity (shipping ripe).
4. Fruit with excellent flavor and eating quality.
5. Middle season maturity of white flesh fruit.
6. Fruit with a skin with pink overspread with light yellow.
7. Vigorous half-open growth.
8. Saccharinity, flavor and aroma of the fruit are not lower even in the rainy season.

1 Drawing Sheet

1

BACKGROUND OF VARIETY

In the country of origin, Republic of Korea, the tree of this disclosure is believed to have been derived from the Korean commercial variety ‘Yumyeong’(unpatented), which is selected among the crosses of Yamato-wasexNumome-wase and within the subspecies ‘dianthiflora’ (Dipp.); and originated in Seomyun, Yunkikun, Chungnam, Republic of Korea. The appropriate botanical classification for this tree is believed to be ‘*Prunus persica*’. This subject tree is believed to be exceptional in a number of characteristics and will offer a further option to commercial growers of stone fruits in terms of fruit having large to very large size, firm flesh, clingstone, acidic sweeter than the fruit of ‘Yumyeong’, attractively colored fruit which has a comparatively high capacity to withstand handling, shipping and storage. The tree has the additional desirable fruit characteristics of heavy production of fruit with an attractive round shape and pleasant, acidic sweet taste, and which is harvested earlier than normal harvest for fruit of extra large size, this tree promises to be a valuable new variety to industry and commerce which has value as a dessert variety but which may also be used as a canner. This tree further has the advantage of being mid to late-season in blooming so that it is less susceptible to late frosts than other locally adapted tree varieties. We are not aware of varieties, which offer a similar or comparable combination of characteristics.

20

ORIGIN OF THE VARIETY

The new tree was selected from among several thousand seedling from ‘Yumyeong’ variety, which had been planted on our farm in Seomyun, Yunkikun, Chungnam, Korea. The seedling was discovered near a specimen of the noted apparent seed parent, which is an early season variety and which normally ripens between July 15 to July 20, which is 90 to 100 days from the blooming days. Our attention was drawn to this tree when we noticed that fruit was much

25

30

35

526 434 914 921" data-label="Text">

2

526 462 914 536" data-label="Text">

sweeter by about 1 to 2°(Bx) than the fruit of the parent ‘Yumyeong’ variety, but that the saccharinity was not changed during the rainy season on the tree, differing from other varieties including the parent ‘Yumyeong’. Based on these observations, we selected the variety for asexual reproduction and commercialization.

526 546 891 559" data-label="Section-Header">

ASEXUAL REPRODUCTION OF THE VARIETY

526 566 914 628" data-label="Text">

Asexual reproduction of the new and distinct variety was performed by budding or grafting in our orchard located in Seomyun, Yunkikun, Chungnam, Korea and shows that all characteristics run true to the original tree and are established and transmitted through succeeding propagation.

526 638 829 650" data-label="Section-Header">

SUMMARY OF THE VARIETY

526 657 914 865" data-label="Text">

The present new and distinct variety of peach tree has been denominated ‘Moonsu’, and the height of the fully grown tree about 3.0 to 3.5 meters, which is almost same as that of the tree, ‘Yumyeong’. The diameter of the new tree is about 6 to 7 meters. This tree grows vigorously with a half-open shape and is regular and productive bearer of extra large, skin with pink overspread with light yellow, white flesh, clingstone fruit with a mild, sweet acidic flavor with excellent eating and stock quality. The fruit is further characterized by having very firm flesh, the ability to hang on the tree 10 to 17 days after maturity (shipping ripe), having good handling and shipping quality, a yellow skin grown color overspread with an attractive red blush and ripening in the middle maturity season, approximately 30 days before ‘Yumyeong’, and approximately the same as ‘Changbang joseng’, which are established commercial varieties in Korea.

526 875 864 888" data-label="Section-Header">

DESCRIPTION OF THE PHOTOGRAPHS

526 895 914 921" data-label="Text">

FIG. 1 shows typical specimens of the fruit of the new and distinct peach variety; and typical leaf from the tree,

'Moonsu'. The illustrations show a bottom view of the fruit, and a fruit divided in its suture plane to reveal flesh coloration, front view thereof and a plane view of the fruit clock-wise. The photographic illustration was taken shortly after being picked (firm ripe);

FIG. 2 shows a peach tree 'Moonsu'. The photographic illustration was taken after almost all the leaves had fallen.

The colors in the photographs are as nearly true as is reasonably possible in a color representation of this type.

DESCRIPTION OF THE VARIETY

The following is a detailed botanical description of the new and distinct variety of peach tree, its flowers, fruit and foliage as based on observations of the specimen grown in our orchard located Seomyun, Yunkikun, Chungnam, Korea, with color terminology (except those in common terms) in accordance with PANTON® Professional Color System Selector (Pantone, Inc., 1984, 1990).

Tree:

Size.—Large.

Vigor.—Vigorous. Having terminal growth of 1.5 to 2 meters per year, with the growth of the trunk terminating at the height of 3 to 3.5 meters in 3 or 4 years, in Chungnam, Korea.

Form.—Usually pruned to half open shape. The new peach tree grows 1.5 to 2 meters every year from the first to the third year, with the trunk terminating at about 3 meters height and then the trunk thickening every year, and the branches extending upwardly at an angle of 40 to 55°, growing 1.5 meters to 2 meters a year to a maximum extent of 6 to 7 meters. Almost the same branching as the parent tree 'Yumyeong'. To obtain large fruit, about 80% pruning of the flowers are necessary.

Production.—Productive (3300 kg/10a).

Bearing.—Regular.

Density.—Medium dense.

Trunk:

Size.—Medium to stocky.

Texture.—Smooth.

Color.—Brown (18-1124) to (18-1222).

Branches:

Size.—Medium.

Texture.—Varies from smooth to medium rough with maturity.

Lenticels.—Medium size. Medium number.

Color.—Brown (18-1031) to (18-1130) having small parts with light green (16-6329) to (16-6339).

Leaves:

Size.—Medium to large. The shape and size are almost the same as those of 'Yumyeong' variety.

Average length.—15 to 16.5 cm.

Average width.—3.2 to 3.7 cm.

Form.—Lanceolate-pointed.

Texture.—Smooth.

Thickness.—Medium.

Margin.—Crenate.

Petiole.—Medium length. Medium thickness.

Glands.—Reniform. Number varies from 0 to 5. Average number 2. Located on base of leaf blade and upper portion of petiole.

Color.—Upper surface green to dark green (18-01117) to (18-0322). Lower surface dull green to grayish green (17-6319) to (17-0119).

Flower buds:

Size.—Medium.

Form.—Plump.

Length.—Medium.

Pubescence.—Pubescent.

Flowers:

Size.—Medium — non-showy.

Blooming period.—Apr. 18–22, 1998 which is the same flowering period as the 'Yumyeong' peach tree. The tree is self-fertile and so it does not require artificial pollination.

Color.—Pink.

Pollen.—Abundant.

Number of petals.—5.

Fruit:

Maturity when described.—Firm ripe.

Date of first picking.—Jul. 15, 1998.

Date of last picking.—Jul. 20, 1998.

Size.—Extra large. Average diameter axially 8.05 to 12.5 cm. Average transversely in suture plane 8.0 to 11.5 cm.

Form.—Globose slightly tip at apex and slightly flattened on stem end. The fruit is exceptionally symmetrical.

Suture.—Shallow but pronounced, extends from base to apex.

Ventral surface.—Nearly rounded, very slightly lipped.

Apex.—Varies from rounded to slight pistil point.

Base.—Retuse.

Cavity.—Rounded to slightly elongated in suture plane.

Average depth 1.5 cm. Average breadth 2.0 cm.

Acidity.—Slight.

Average saccharinity.—11.5–14° Bx.

Skin:

Thickness.—Medium.

Texture.—Tenacious to flesh.

Tendency to crack.—None

Down.—Moderate amount, short to very short in length.

Color.—Red (17-1654) to (17-1562).

Flesh:

Texture.—Very firm.

Ripens.—Evenly.

Fibers.—Small, tender.

Juice.—Moderate.

Flavor.—Excellent, mild, acidic sweet.

Aroma.—Moderate.

Eating quality.—Excellent.

Amygdalin.—Undetected.

Color.—White (no Pantone number) spread with small amount of red (17-2036). Sacchrinity, flavor and aroma are not lowered even in the rainy season

Stone:

Type.—Clingstone.

Size.—Large. Average length 2.7 cm. Average width 2.6 cm. Average thickness 1.7 cm.

Form.—Ovoid.

Base.—Mostly straight some rounded.

Apex.—Acuminate.

Sides.—Equal.

Surface.—Irregularly furrowed toward apex, ridges usually rounded, pitted toward base.

Tendency to split.—None.

Color.—Brown to reddish brown (18-1540) to (19-1540).

Use: The fruit of the present new variety is well suited for novelty, processing and canning, as well as for use as a dessert peach.

Market.—Local and long distance.

Keeping quality: Very good.

Shipping quality: Very good.

The new and distinct variety of peach tree, its foliage and fruit described above may vary in slight detail due to variations in climate, soil conditions and cultural practices under which the variety may be grown. The botanical description above is that of the variety grown under the

ecological conditions prevailing near Seomyun, Yunkikun, Chungnam, Korea.

We claim:

1. A new and distinct variety of peach tree, substantially as illustrated and described, characterized in that the tree is large, grows vigorously with a half open shape and is a regular and productive bearer of large, early season maturing, white flesh, clingstone fruit with excellent flavor and eating quality; the fruit is further characterized in that it has very firm flesh, good handling and shipping quality and has a skin with pink overspread with light yellow.

* * * * *

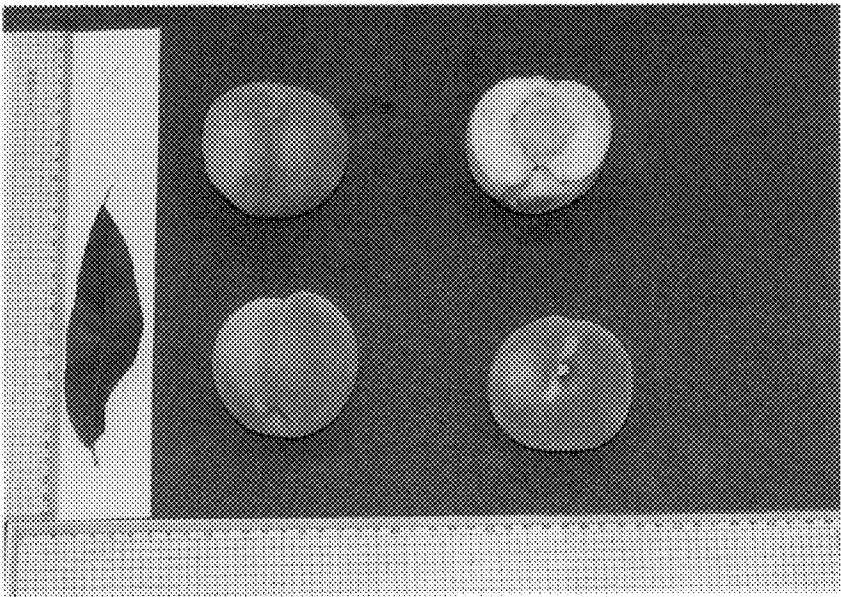


Fig. 1

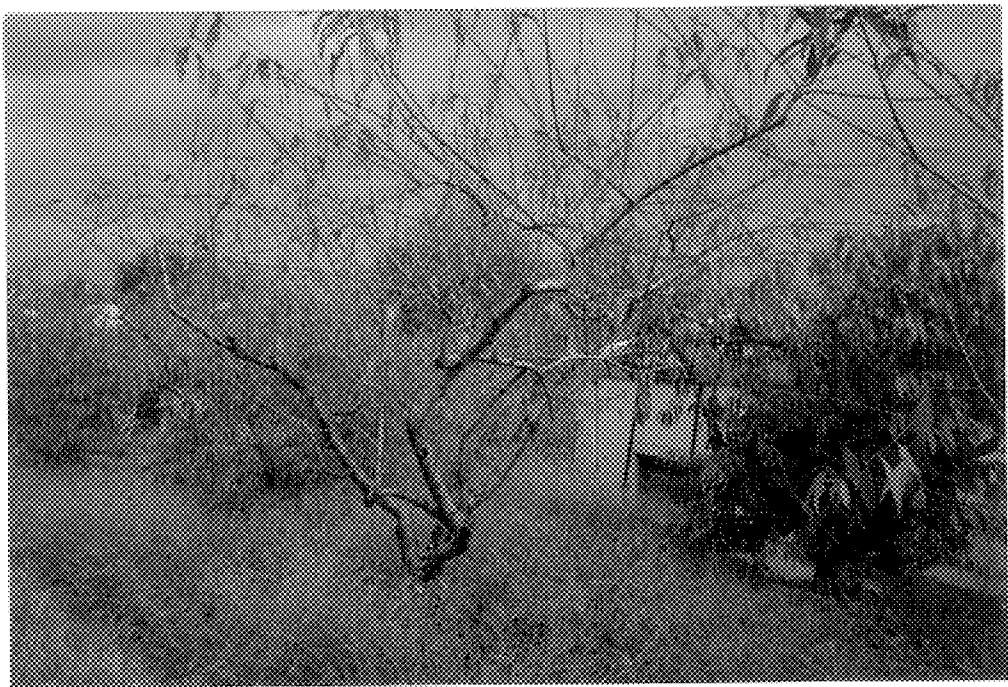


Fig. 2