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(12) **United States Plant Patent**  
**Pinochet**

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(54) **VARIETY OF PRUNUS ROOTSTOCK NAMED**  
**'TEMPROPAC'**

(50) Latin Name: *(Prunus dulcis*×*P. persica)*×*P. persica*  
Varietal Denomination: **Tempropac**

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patent is extended or adjusted under 35  
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*A01H 5/00* (2006.01)

(52) **U.S. Cl.** ..... **Plt./174**

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See application file for complete search history.

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(57) **ABSTRACT**

A new and distinct hybrid peach plant used as a rootstock that  
exhibits red leaves, root-knot nematode resistance, and com-  
patibility with peach, nectarine, and almond varieties.

**4 Drawing Sheets**

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Botanical classification: *(Prunus dulcis*×*P. persica)*×*P.*  
*persica*.

Varietal denomination: 'Tempropac'.

**BACKGROUND OF THE INVENTION**

The present invention comprises a new and distinct cultivar  
of hybrid peach (*Prunus dulcis*×*P. persica*)×*P. persica* used as  
a rootstock known by the varietal name 'Tempropac' (experi-  
mental designation is PAC 9917-26). The new variety was  
discovered in Barcelona, Spain in 1999 as a result of a  
planned breeding program. The new variety is the result of a  
cross between 'Monegro' (*Prunus dulcis*×*P. persica*) (female  
parent, unpatented) and 'Flordaguard' *Prunus persica* (male  
parent, unpatented, public domain rootstock). The purpose of  
the breeding program was to develop rootstocks with low  
chilling requirements for peach varieties. The new variety  
exhibits similar red leaves and root-knot nematode resistance  
to both parents, but has a larger leaf size than both parents.  
Further, the new variety has similar chilling requirements to  
'Flordaguard', but tolerates calcareous, alkaline soils better  
than its male parent, and the new variety's mature leaves turn  
green on the upper surface early in the season. The new  
variety has been trial and field tested and has been found to  
retain its distinctive characteristics and remain true to type  
through successive propagations. The following characteris-  
tics distinguish 'Tempropac' from other varieties known to  
the breeder:

1. Red leaves;
2. Early flowering;
3. No suckering;
4. Low chilling requirements;
5. Mature leaves are dark green on the upper surface and  
purple on the lower surface;
6. Flower stamens are dark pink to purple in color;
7. Mature leaves maintain a red toned petiole; and
8. Improved tolerance to salinity.

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**DESCRIPTION OF THE DRAWINGS**

The accompanying photographic drawings illustrate the  
new variety with the color being as nearly true as is possible  
with color illustrations of this type:

FIG. 1 shows an entire plant of the new variety;

FIG. 2 is a close-up view of the mature leaves of 'Tempro-  
pac';

FIG. 3 is a close-up view of the flowers of the new variety;  
and

FIG. 4 is a close up view of the fruit the new variety.

**DESCRIPTION OF THE PLANT**

The following detailed description sets forth the character-  
istics of the new cultivar. The data which defines these char-  
acteristics was collected under natural daylight on plants  
produced by asexual reproductions via in vitro propagation  
carried out in Barcelona, Spain. The plants were grown under  
normal field conditions. Color designations are presented  
with reference to the "Dictionary of Color" by A. Maerz and  
M. Rea Paul, Second Edition (1950).

**TREE**

- Age: 7 years.
- Size: 3.6 meters tall.
- Vigor: Medium to high.
- Density: Low.
- Form: Semi-compact.
- Production: Abundant.
- Growth type: Upright spreading.
- Bearing: Fruit bearing.
- Pathogen resistance:
  - Fungal disease*.—Unknown.
  - Insects*.—Unknown.
  - Mites*.—Unknown.
  - Viruses*.—Unknown.
  - Other diseases*.—Root-knot nematodes (*Meloidogyne*  
spp.).

## Rootstock performance:

*Root sprouts (suckering)*.—Not present.

*Anchorage*.—Deep and spreading laterally.

*Compatibility*.—Compatible with peach, nectarine, and almond varieties.

*Vigor*.—Medium-high to high (similar to 'Nemaguard').

## Trunk:

*Size*.—11 to 12 cm. in diameter.

*Surface texture*.—Smooth with slight scarfskin and large horizontal lenticels.

*Bark color*.—Plate 45, A 1 (Aluminum). The older the tree, the more ash-like the color.

*Lenticels*.—Length: 6 to 15 mm., oriented horizontally.

Width: 1 to 2.5 mm. Color: Plate 6, A 1. Density: Medium.

## Branches:

*Diameter*.—5 to 15 mm. (season's growth).

*Surface texture*.—Smooth with the current season with minor scarfskin as maturity advances.

*Color*.—Plate 7, E 10 (Chestnut) on the upper side of the branch and Plate 21, L 5 (Grass Green) on the lower side of the branch. Greenish-brown tones turn grayish-brown late in the season.

*Form*.—Circular in diameter.

*Average angle*.—Acute.

*Bud arrangement*.—Helicoidal throughout the branch.

*Lenticels*.—None present.

## Leaves:

*Length*.—14 to 20 cm.

*Width*.—4 to 5 cm.

*Form*.—Lanceolate (elliptic); peach-like.

*Texture*.—Smooth and satiny on the upper surface.

*Thickness*.—Thin.

*Base*.—Right angled.

*Apex*.—Acute.

*Margin*.—Crenate.

*Pubescence*.—Upper surface: Absent. Lower surface: Absent.

*Color*.—Young leaves: Upper surface: Plate 7, L 7 (Maroon). Lower surface: Plate 7, J 6 (Garnet). Mature leaves: Upper surface: Plate 24, E 12 (Evergreen). Lower surface: Plate 8, L 8 (Brazil Brown).

*Petiole*.—Shape: Straight with a central groove along the top with large size nectaries near the base of the leaf. Length: 1.5 to 2 cm. Diameter: 2 mm. Color: Plate 7, J 5 (Tapestry Red).

*Veins*.—Venation type: Tree type disposition. Color: Upper surface: Plate 23, L 6 (Cypress Green). Lower surface: Plate 8, J 9 (Hindu Galleon).

## Flower buds:

*Pedice*.—Length: 0.5 mm. (barely noticeable). Diameter: 2 mm. Color: Plate 7, C 8, (Mauve Taupe).

*Bud*.—Length: 1.5 to 2.5 mm. Width: 1 to 2 mm. Shape: Ovoid and pointed. Color: Rapid variations in color tones from brown to gray; Plate 8, H 9 (Rembrandt) to Plate 16, A 6 (Taupe).

## Flowers:

*Bloom timing*.—February 17th in Barcelona, Spain.

*Blooming period*.—10 to 15 days.

*Pollination requirements*.—None.

*Number of flowers per raceme*.—Individual.

*Fragrance*.—Medium to high (strong), rose-like.

*Petals*.—Number: 5. Length: 14 to 17 mm. Width: 7 to 9 mm. Shape: Elliptic. Aspect: Cupped upwards and inwards. Margin: Smoothly undulate. Texture and appearance: Smooth.

*Color*.—When opening: Upper surface: Plate 2, C 1. Lower surface: Plate 1, C 2 (Peach blossom). Fully opened: Upper surface: Plate 3, C 1. Lower surface: Plate 2, E 3.

*Sepals*.—Shape: Elliptic and pointed. Margin: Smooth. Texture: Pubescent. Length: 5 to 7 mm. Width: 3 to 5 mm. Color: Upper surface: Plate 8, L 5 (Zanzibar). Lower surface: Plate 7, L 8 (Mascara).

*Stamens*.—Number (per flower): 18 to 24. Filament length: 10 to 13 mm.

*Anthers*.—Shape: Kidney-shaped. Length: 1 mm. Color: Plate 13, H 7 (Yellow Beige).

*Pollen*.—Color: Plate 13, J 9 (Hazel). Amount: Abundant.

*Pistils*.—Length: 14 to 16 mm.

*Style*.—Length: 13 to 14 mm. Color: Plate 12, I 2 (Hay).

*Stigma*.—Shape: Flat and rounded. Color: Plate 12, J 6 (Honey Middlestone).

## Fruit:

*Maturity when described*.—First week of August.

*Size*.—Diameter: 2 to 2.5 cm. Length: 3 to 4 cm.

## Skin:

*Thickness*.—Thin.

*Texture*.—Smooth and pubescent.

*Tendency to crack*.—Not present.

*Color*.—Plate 7, J 9 (Tanagra).

*Ground color*.—Uniform.

## Flesh:

*Aroma*.—Very weak.

*Color*.—Plate 19, I 1 (Butterfly).

*Texture*.—Hard.

*Eating quality*.—Leathery-type (not good).

## Seeds:

*Number per fruit*.—One.

*Length*.—1.8 to 2.3 cm.

*Breadth*.—1.2 to 1.5 cm.

*Form*.—Wide and elliptic.

*Color*.—Plate 14, D 7 (Adobe).

## Stem:

*Length*.—Variable.

*Width*.—3 to 7 mm.

*Color*.—Plate 8, L 7 (Carbuncle).

Use: As a rootstock for peach, nectarine, and almond varieties.

Winter hardiness: Hardy (under the conditions in Spain).

Bud winter hardiness: Medium.

Drought tolerance: Moderately tolerant.

I claim:

1. A new and distinct variety of hybrid peach plant used as a rootstock, as illustrated and described herein.

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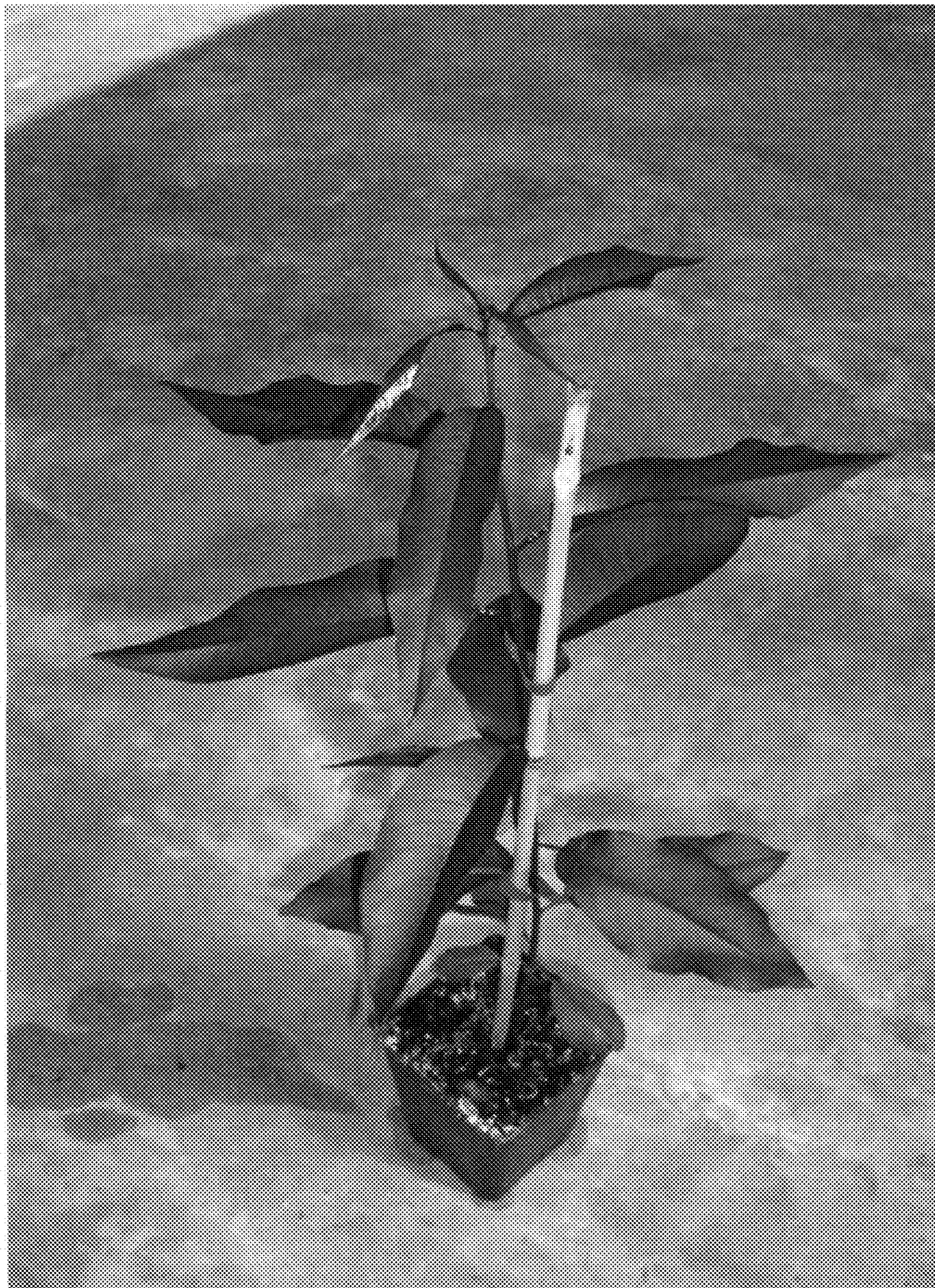


Fig. 1





Fig. 2





Fig. 3



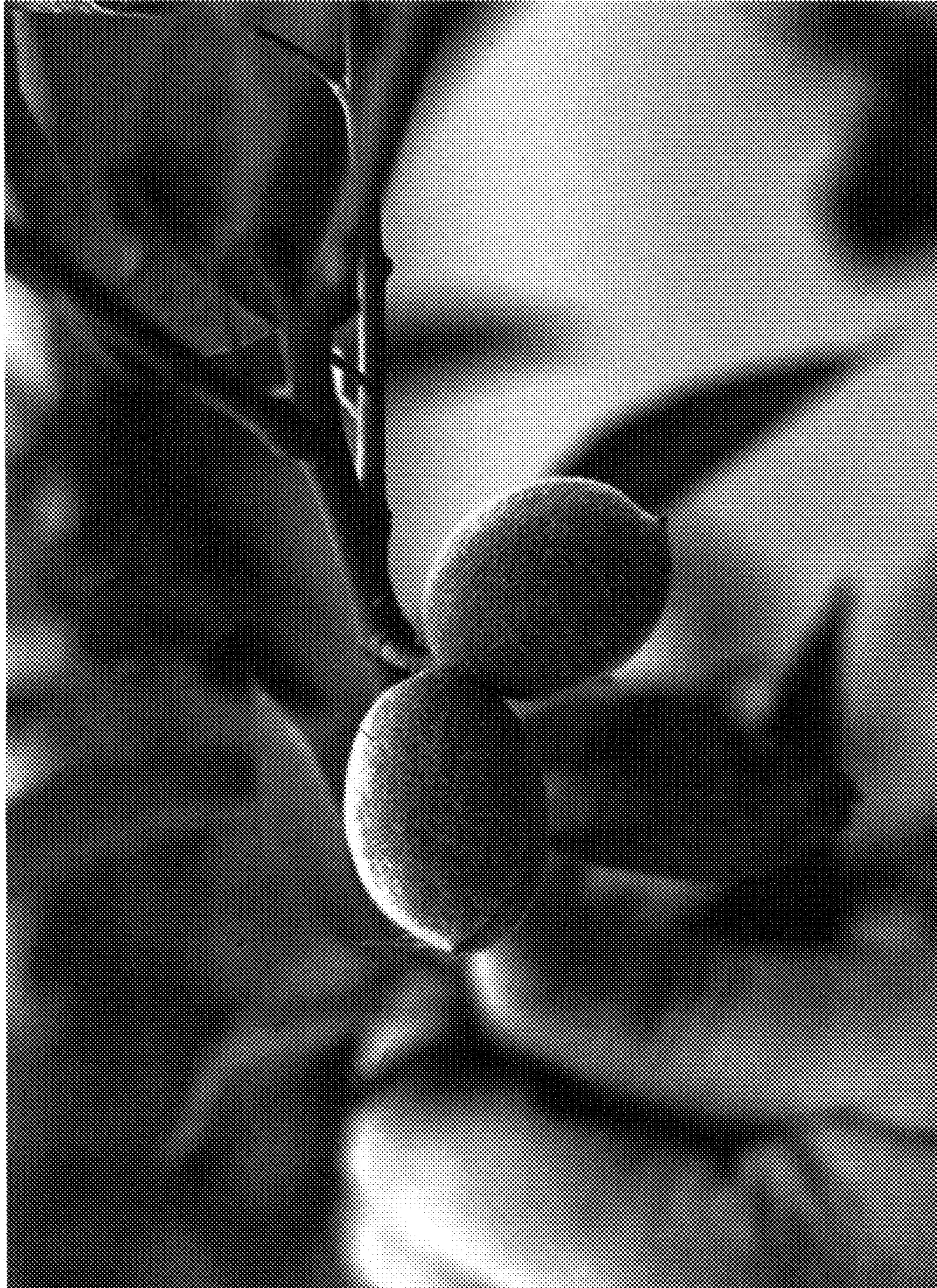


Fig. 4