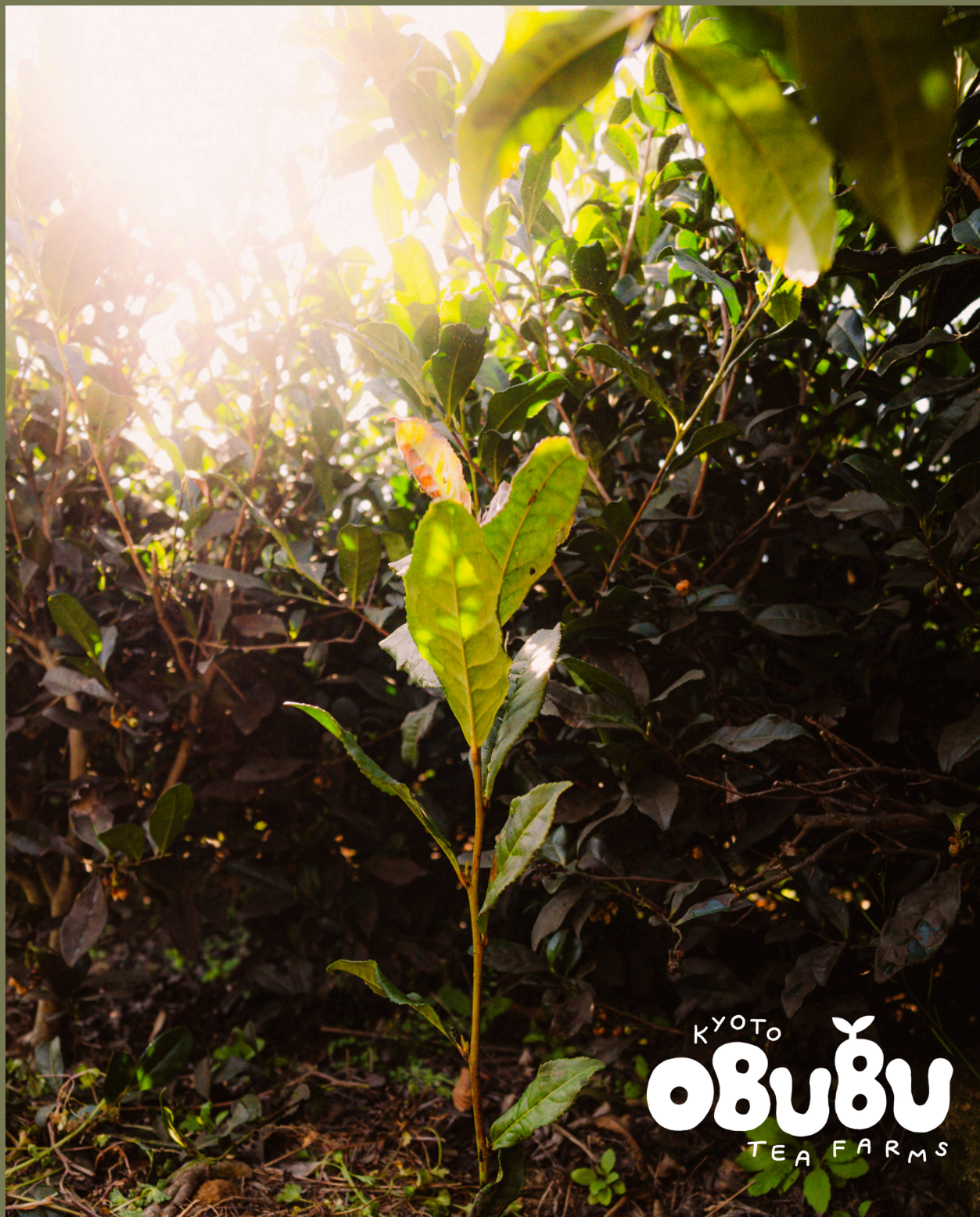
Tea Field Renewal in Wazuka

From Past Fields to New Beginnings
Young Ujihikari Tea Bushes



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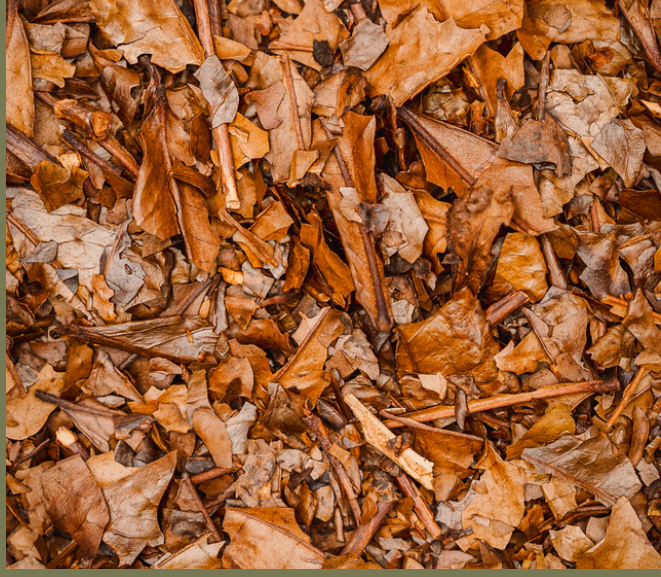

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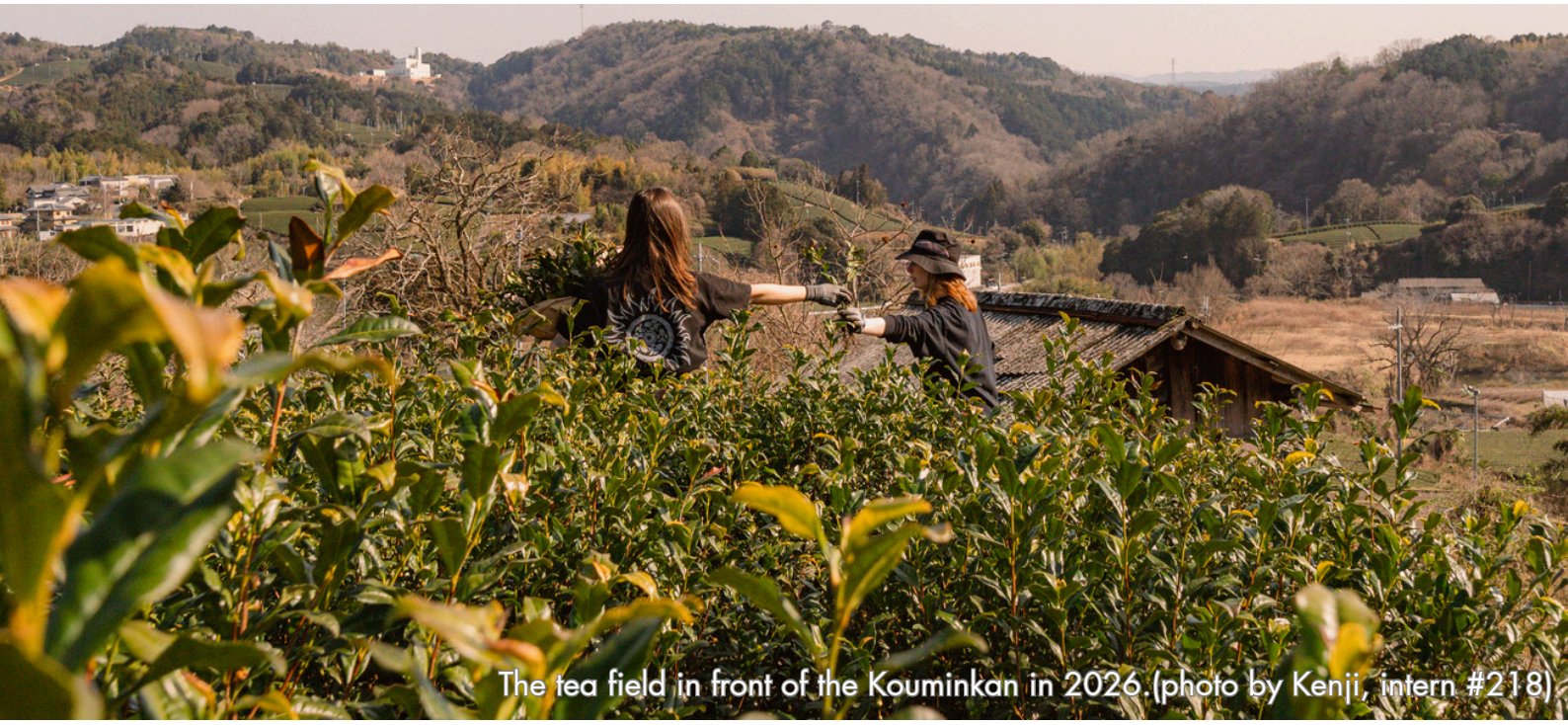
Abstract



The tea field in front of the Kouminkan in 2026.(photo by Kenji, intern #218)

In a small plot in front of the Kouminkan in Wazuka, tea seedling cultivation began in 2019. The site was previously an established tea field growing the cultivar Yabukita. In 2022, the field underwent a full reset as part of a replanting process, including **controlled burning (noyaki/野焼き)** to clear residual vegetation and prepare the soil for a new cultivation cycle.

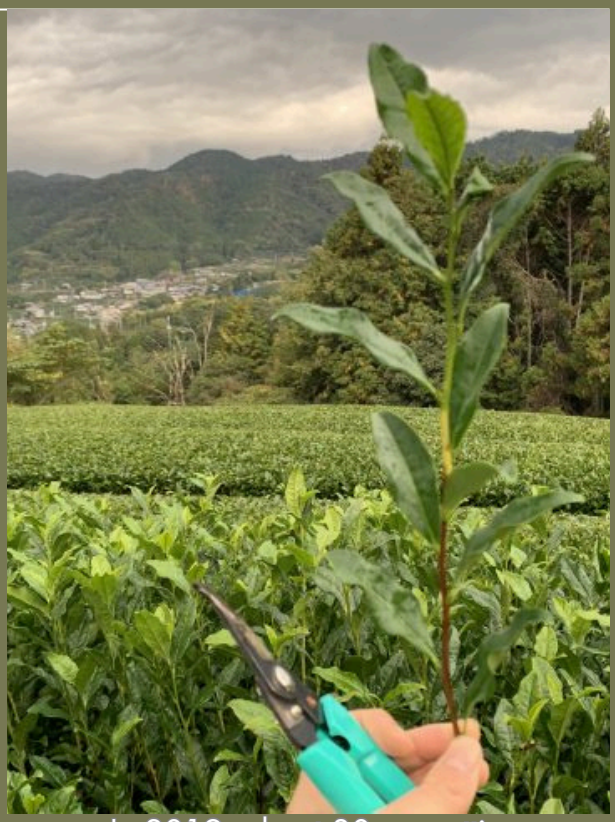
The current planting consists of Ujihikari propagated from cuttings sourced from a tea farmer in Erihara(撰原). Seedlings were raised using a **vinyl-covered nursery system**, which maintains internal moisture circulation with minimal irrigation. They were grown under controlled conditions during the first year and transplanted outdoors in the second year using soil consistent with the field environment to reduce transplant stress.

From 2022 to 2026, the field has remained in an **establishment phase**, characterized by gradual growth and supplementary planting to improve uniformity.

This case illustrates that tea field development is a **multi-year process**, involving land resetting, controlled propagation, and staged field establishment rather than immediate production.

From 2019: The Propagation of Ujihikari

The current field is planted with Ujihikari, a cultivar selected from Kyoto native tea plants and developed in 1954.



In 2019, about 30 cm cuttings were taken from the mother plant. (photo by Moe, intern #67)

Cultivar Characteristics

- Bright green leaf color
- Suitable for tencha (matcha raw material)
- Strong response to shading, suitable for gyokuro production

Propagation began in **November 2019**, using cuttings sourced from a tea farm in Erihara(撰原) .

Propagation Method: Vegetative Cuttings

Instead of seed propagation, cuttings were used to ensure:

- Genetic consistency
- Stable quality
- Predictable growth performance

The buds planted in neat rows (photo by Moe, intern #67)

Cutting Procedure

- Branches (~30 cm) taken from mature plants
- Trimmed into segments with two leaves
- Inserted into nursery beds at uniform spacing
- Planted at a depth where the second leaf is slightly covered

This stage represents the **initial phase of field formation**, occurring before visible field development.

Nursery Method: Plastic-Covered Propagation System

vinyl-covered propagation system（ビニール被覆育苗法）

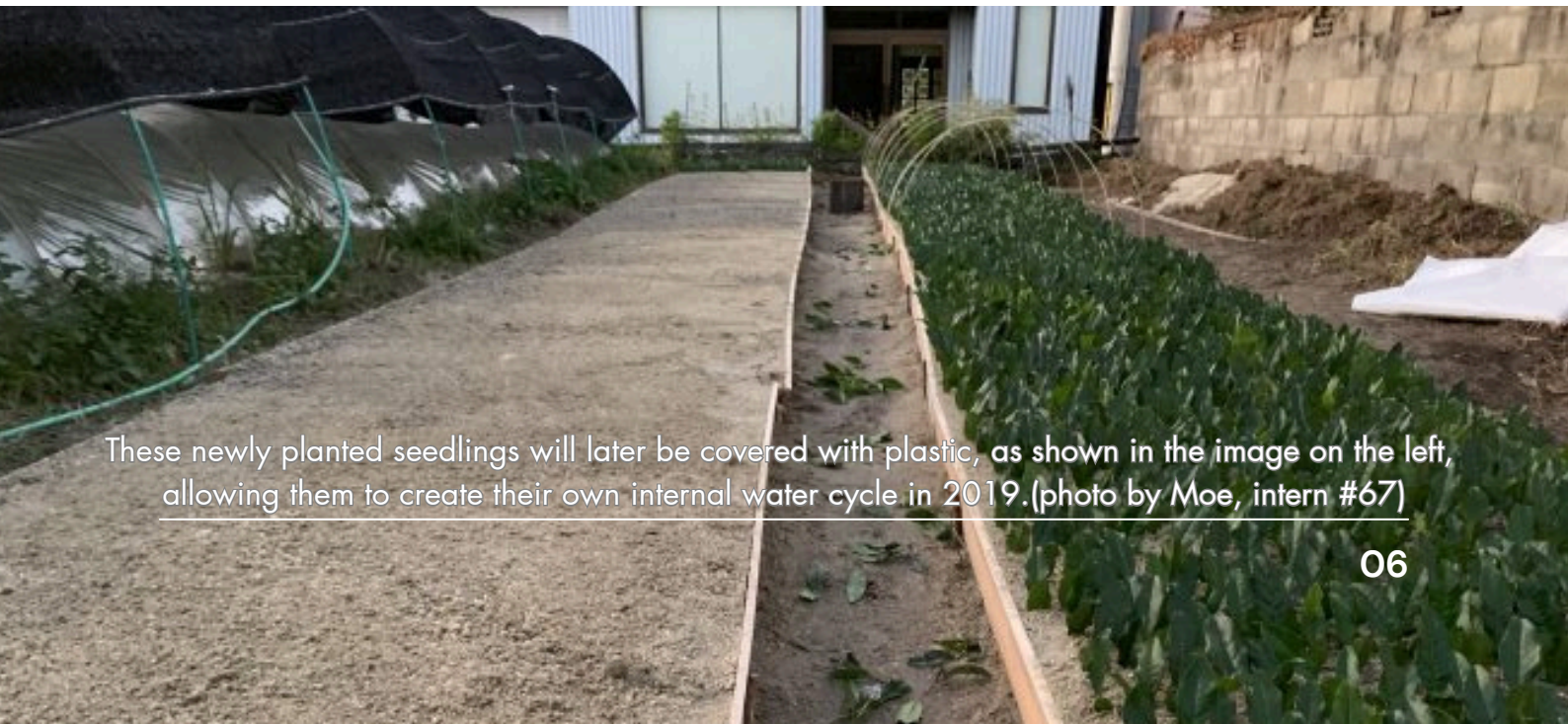
System Characteristics

- Initial watering only at the start
- Closed environment enables internal water circulation
- Moisture maintained through condensation and evaporation
- Minimal external irrigation required

Growth Timeline

- Year 1: Growth within controlled nursery environment
- Year 2: Transplantation to field conditions

Notably, the soil used in the nursery was sourced from the Kouminkan field, ensuring environmental consistency and reducing transplant shock, and was mixed with new sandy soil to minimize weed growth.
This reflects a **controlled cultivation approach**, prioritizing environmental stability over frequent intervention.



These newly planted seedlings will later be covered with plastic, as shown in the image on the left, allowing them to create their own internal water cycle in 2019.(photo by Moe, intern #67)

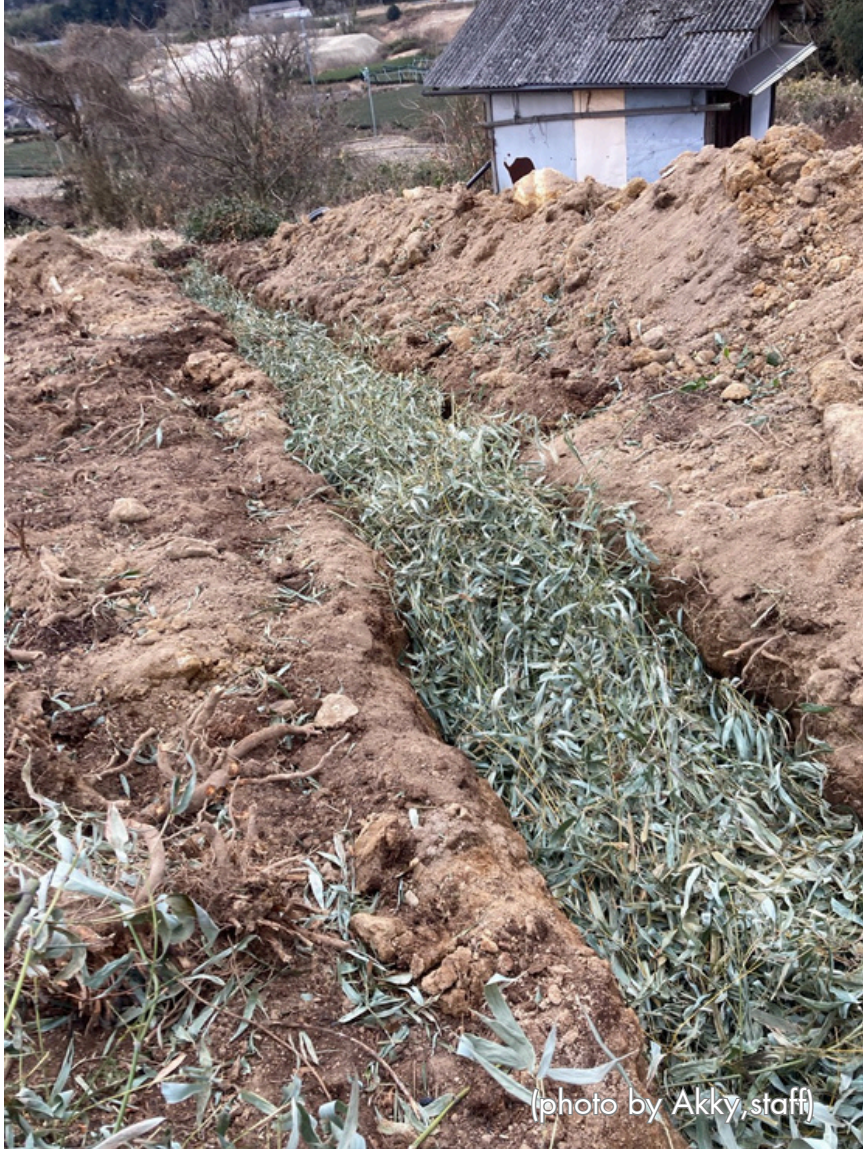
Land Reset and Soil Reconditioning: An old Yabukita Tea Field


(photo by George,staff)

Before the current planting, this land functioned as an older tea field cultivated with Yabukita, one of the most widely grown tea varieties in Japan.
To initiate a new cultivation cycle, the field underwent a comprehensive **replanting process (改植kaisyoku / field renewal)**, combining both surface clearing and subsurface soil reconditioning.

1. Surface Reset

Clearing and Controlled Burning



The initial stage involved:

- Removal of existing tea plants and root systems
- Clearing residual vegetation
- Application of controlled burning (noyaki / 野焼き)

This process serves to:

- Eliminate residual organic material
- Reduce accumulated pests and diseases
- Return nutrients to the soil through ash
- Restore and readjust the physical, chemical, and biological conditions of the topsoil so that it returns to a sustainable baseline state

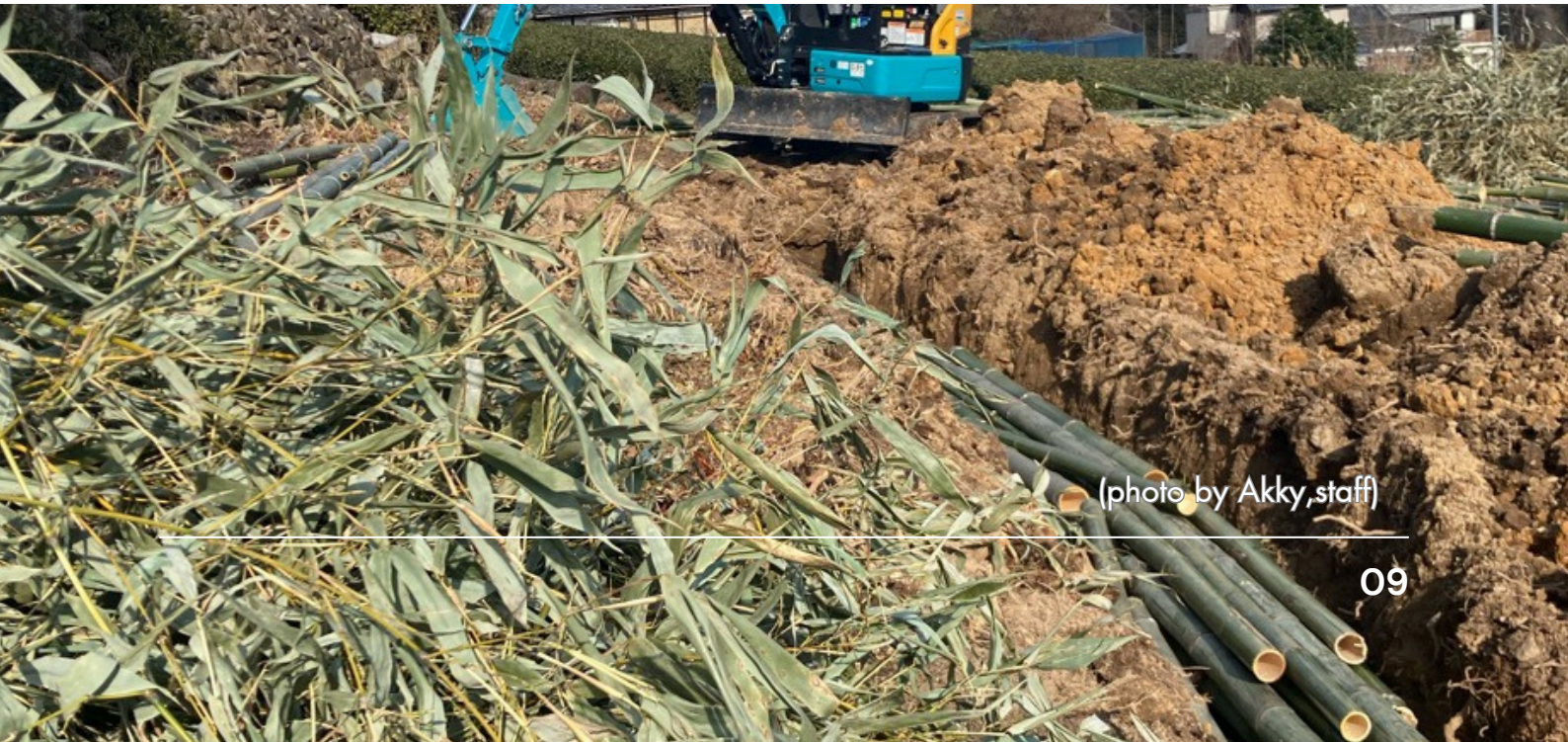
2. Subsurface Drainage and Soil Preparation

Following surface clearing, deeper soil intervention was conducted using excavation machinery.

Drainage Improvement

- Trenches were dug using a mini excavator
- Bamboo was placed underground to improve drainage pathways
- Layers of bamboo grass (sasa/笹) were added above
- Soil was then refilled to complete the drainage structure

This system helps facilitate smoother underground water flow, preventing water stagnation.



(photo by Akky,staff)

3. Soil Layer Reconfiguration

A key step in the renewal process involved reversing and replacing soil layers:

- Surface soil (depleted from long-term use) was removed
- Fresh subsoil was brought upward to replace it
- The original topsoil, containing weed seeds and reduced fertility, was buried deeper

Additional actions included:

- Removing remaining tea roots and burying them underground
- Encountering and relocating large rocks during excavation
- Embedding stones back into deeper soil layers

This process improves:

- Soil fertility
- Root penetration conditions
- Weed control at early stages

(photo by Akky,staff)

4. Field Surface Preparation

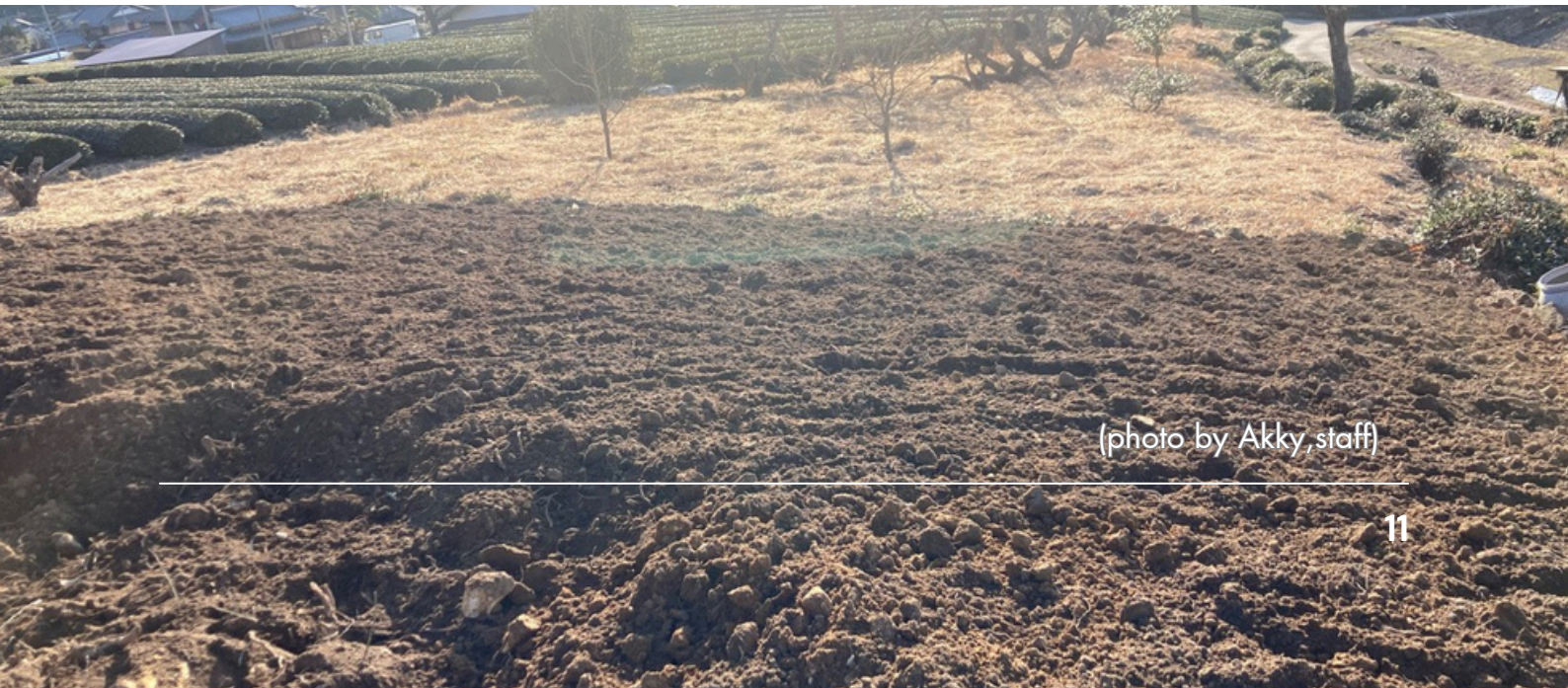
After soil replacement:

- The field surface was leveled and refined
- Soil was loosened and slightly raised to improve planting conditions
- Care was taken to avoid compaction, especially in newly aerated areas

This created a soft, well-drained planting bed suitable for young tea seedlings.

5. Transition to Planting

Following these preparation stages, the field was ready for planting.



(photo by Akky, staff)

Land Reset and Soil Reconditioning: Key Insight

(photo by Akky staff)

The field reset process extends beyond simple clearing. It involves:

- Surface-level ecological reset (burning and clearing)
- Subsurface engineering (drainage and soil restructuring)
- Restoration of soil vitality

This integrated approach reflects the importance **of soil as a living foundation** in long-term tea cultivation systems.

Transplanting: Moving into the Tea Field

Transplanting (teishoku /定植)
is a crucial step that connects the nursery stage to the tea field.

Key considerations include:

1 Layout and Marking

- Determine row (ridge) positions in advance
- Use strings or guides to mark planting points and maintain straight alignment

2 Digging Planting Holes

- Dig holes according to the size of each seedling
- Ensure sufficient space for root placement

3 Planting

- Prevent roots from drying during handling
- Position roots downward without bending or folding
- Avoid planting too deeply
- Do not compact soil excessively during planting

Note
Deep planting may cause the formation of a double root system, particularly in clay-rich soils.

Transplanting: Moving into the Tea Field

Transplanting (teishoku /定植)
is a crucial step that connects the nursery stage to the tea field.

Key considerations include:

4 Irrigationかん水/kamsui

- Apply approximately **4–5 liters of water per plant**
- Allow water to settle soil around the roots
- Irrigate as soon as possible after planting

5 Soil Adjustment (Hilling)土寄せ/tsuchiyose

- After irrigation, soil may settle and expose roots
- Add and level soil around the base of the plant
- Ensure stable coverage of the root zone

6 Mulchingしき草/sikigusa

- Apply materials such as rice straw or grass around the base;this year, we used Kuki/茎.
- Functions:
  1. Prevent soil drying
  2. Stabilize seedlings
- Reference amount: approx. 1,500 kg per 10a (are)

Transplanting: Moving into the Tea Field

Transplanting (teishoku /定植)
is a crucial step that connects the nursery stage to the tea field.

Key considerations include:

7 Pruning (Initial Training)せん枝/senji

Conduct pruning to:

- Promote branching
- Balance water uptake and transpiration

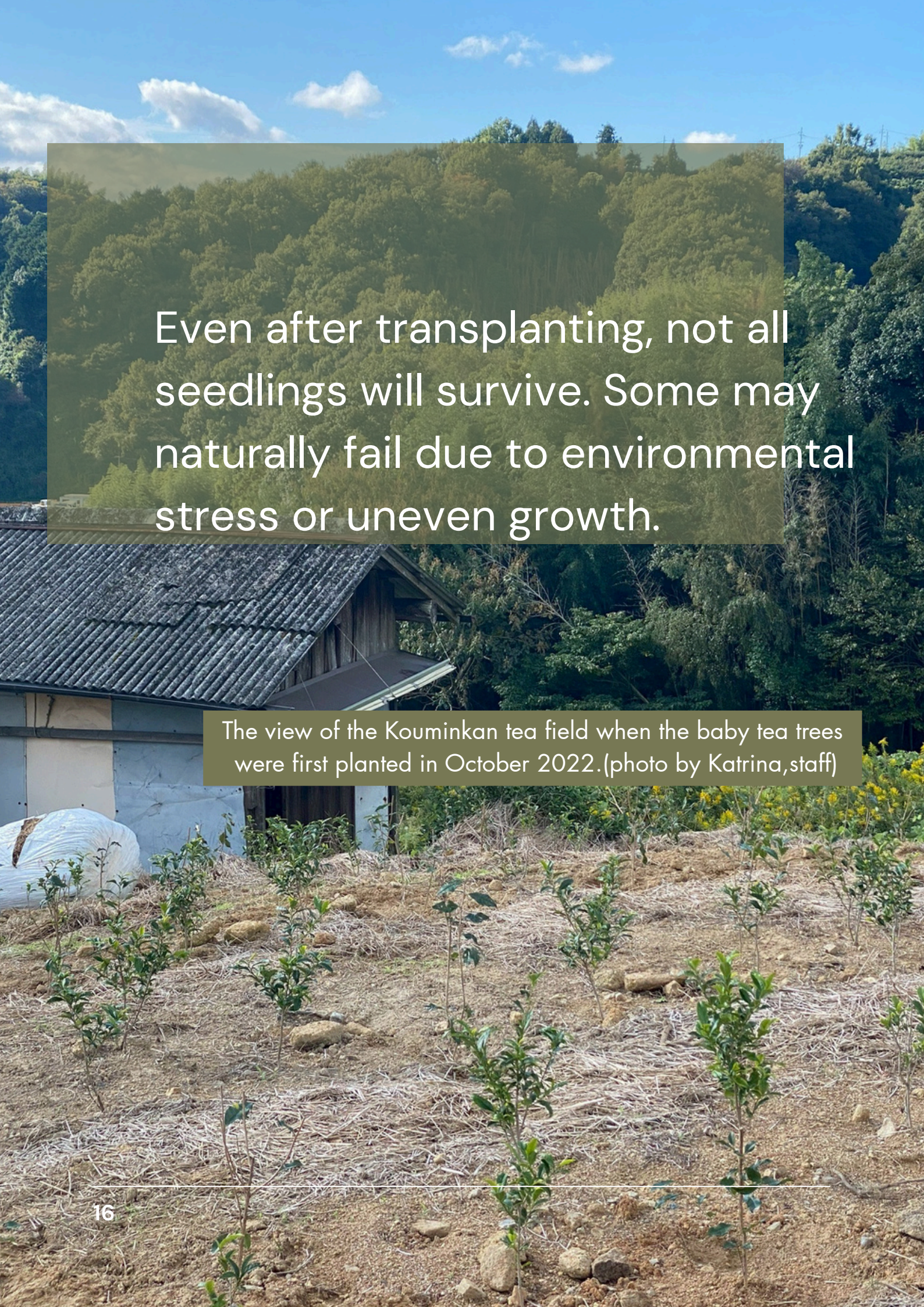
Guidelines:

For 2-year-old seedlings:

- Cut at approximately 15–20 cm above ground
- Leave at least 10 mature leaves

For 1-year-old potted seedlings:

- Cut at approximately 10–15 cm above ground
- Leave at least 5 mature leaves



Even after transplanting, not all seedlings will survive. Some may naturally fail due to environmental stress or uneven growth.

The view of the Kouminkan tea field when the baby tea trees were first planted in October 2022.(photo by Katrina,staff)

Kouminkan Field: A Continuing Process (2022-2026)

Following the initial planting in autumn 2022, the field has remained in an **early establishment phase.**

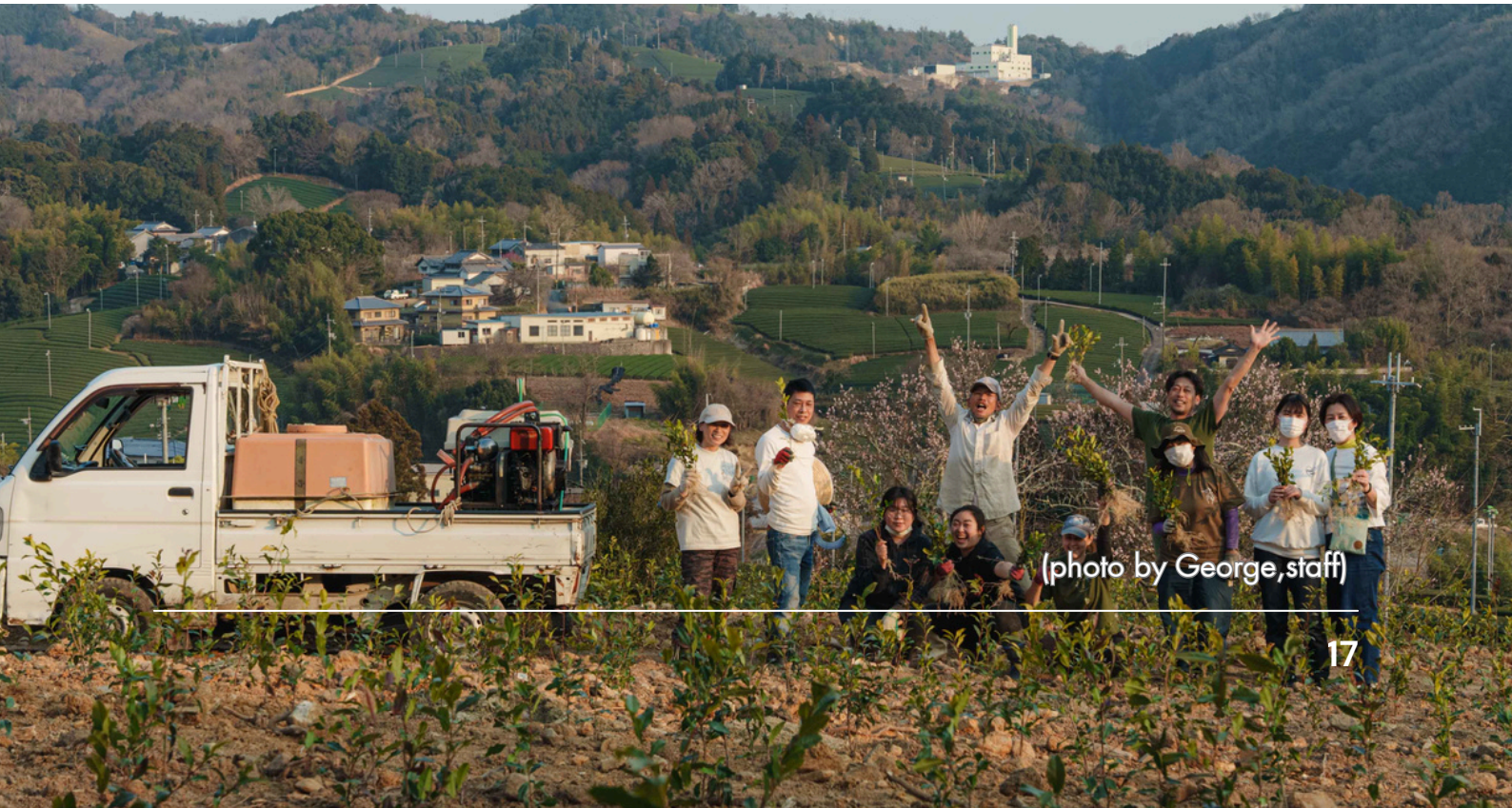
Observed Characteristics

- Gradual root and canopy development
- Variation in individual plant growth
- Natural loss of weaker seedlings

Management Practice

- Regular weed control (manual or mechanical)

At this stage, management is relatively minimal. Rather than intensive intervention, the focus is on maintaining basic field conditions and allowing the plants to establish under stable environmental conditions.



(photo by George,staff)

2026 Update: Supplementary Planting and Early Harvest Potential

In March 2026, additional Ujihikari seedlings were planted in the Kouminkan field.
This supplementary planting was carried out to replace seedlings that had not survived during the earlier establishment period.

This process reflects a common practice in tea field development:

- Maintaining field density
- Improving uniformity of plant distribution
- Supporting long-term productivity

According to field guidance from Akky, if plant growth continues successfully, there is a possibility that some of the earlier-established tea bushes may reach a condition suitable for first harvest as early as spring 2026.

Key Insight

The Kouminkan field demonstrates that early-stage tea cultivation involves:

- gradual selection (through natural loss of weaker plants)
- continuous adjustment (through supplementary planting)

rather than uniform or immediate establishment.

(photo by Kenji, intern #218)

Reflection: The Invisible Beginning of Tea

This small plot at the Kouminkan is used to plant surplus tea seedlings from transplanting, serving as a reserve stock to replace any seedlings that fail in the main tea field.(photo by George,staff)

The Kouminkan tea field provides a clear example of tea cultivation as a l**ong-term, staged agricultural system.**

From:

- propagation through cuttings
- controlled nursery cultivation
- field transplantation
- to gradual establishment

each stage contributes to the formation of a productive tea field over several years.

This process emphasizes that tea production is not defined by a single moment of planting, but by continuous management, environmental control, and adaptation over time.

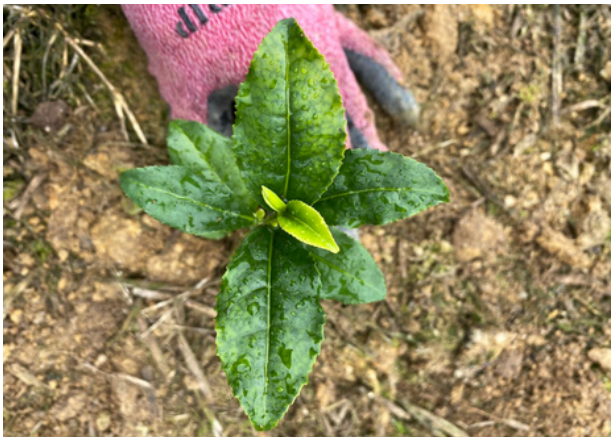
Timeline

2019 (Nov)

- Ujihikari cuttings prepared (Erihara source)
- Vegetative propagation begins (2-leaf cuttings)

2020–2021

- Nursery cultivation (vinyl-covered system)
- Root development and early growth



2022 (Spring–Autumn)

- Field reset (改植)
  - Old Yabukita field removed
  - Controlled burning (野焼き)
- Transplanting (定植)
  - Single-plant planting system
  - Spacing: 30–45 cm between plant

Timeline

2023–2025

- Establishment phase
- Gradual root and canopy development
- Regular weed control

2026 (Spring)

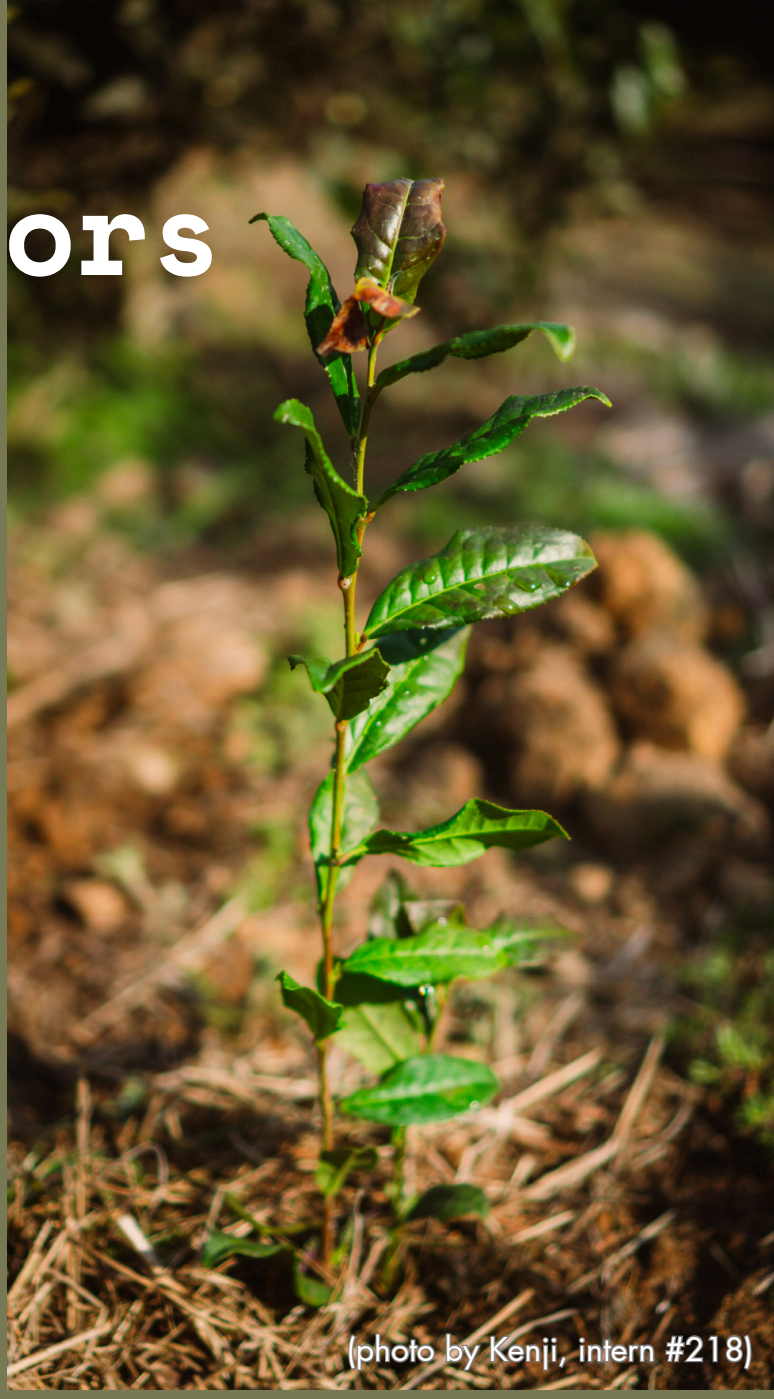
- Supplementary planting (Ujihikari)
- Replacement of unsuccessful seedlings

Key Insight

Tea field development = multi-year system

Propagation → Nursery → Field Reset → Transplanting → Establishment → Adjustment

Contributors


(photo by Kenji, intern #218)

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References：
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