ASIAGAP

Asia Good Agricultural Practice

Control Points and Compliance Criteria (for Farms)

Fruits and Vegetables Ver.2.1

Issue date: 1st May 2018

Principles of ASIAGAP

ASIAGAP aims to establish agricultural production that is consistent and sustainable for human beings, the earth, and economic sustainability and aims to build trust among producers, distributors, and consumers.

ASIAGAP was developed as a tool to achieve the safety of agricultural products, sustainability of agricultural production, safety and protection of human rights among workers, and well-organized sales management of agricultural products in the farms of Japan, East Asia, and South East Asia. By implementing ASIAGAP, producers can achieve sustainable farm management and simultaneously gain trust from consumers and food industry stakeholders.

ASIAGAP is based on the Japanese agricultural context and legal regulations and has been developed through collaborations between agricultural producers, wholesalers, food manufacturers, and retailers. It is important that the standard is feasible and easy to implement for agricultural producers in the long run, while simultaneoulsy ensuring that agricultural production management meets the expectations of consumers and food industry stakeholders.

ASIAGAP should be implemented voluntarily by producers, and its stage of implementation will be recognized by society through the system of audit and certification. It should work as a standard that stands for the credibility of agricultural producers.

ASIAGAP's ultimate goals are to simultaneously protect the consumers by assuring safe agricultural products, to conserve the environment on the earth, and to achieve sustainable farm management.

Table of content

1. Introduction	р.1	15. Soil management	p.41
2. How to use this document	p.2	16. Use of water and wastewater management	p.42
3. Flow of an ASIAGAP audit and certification	p.3	17. Prevention of cross-contamination of sites and	p.44
4. Summary of procedures up to certification	p.4	facilities	
5. Copyright	p.5	18. Management of machinery, equipment, vehicles,	p.48
6. Disclaimer	p.5	harvesting containers and tools, packaging	
7. Terms and definitions	p.5	materials, cleaning equipment	
		19. Energy management and preventing global warming	p.50
[Control Points and Compliance Criteria]		20. Waste management and effective use of resources	p.51
A. Basic farm management	p.12	21. Protection of surrounding environment and	p.51
1. Visualization of farm management	p.12	harmonizing with local communities	
2. Responsibilities of top management	p.14	22. Biodiversity conservation	p.52
3. Planning and evaluation	p.16		
4. Prerequisite program for food safety	p.18	C. Cultivation process management	p.53
5. Risk management of food safety in production process	p.19	23. Management of propagation materials	p.53
6. Food defense and food fraud mitigation	p.23	24. Agrochemical management	p.54
7. Supplier management	p.24	25. Fertilizer management	p.62
8. Product inspection and sorting	p.27	_	
9. Handling of complaints, abnormalities, and violations of rules	p.28	D. Control points for sprouts only	p.66
10. Product identification and traceability	p.29	E. Control points for mushrooms only	p.69
B. Management of resources	p.31		
11. Responsible personnel and training	p.31		
12. Human rights, welfare, and labor management	p.35		
13. Hygiene management of workers and visitors	p.38		
14. Worker safety management and responses	p.39		
in case of accidents			

1. Introduction

This document compiles Good Agricultural Practices for the following topics and provides the manner of good farm management and its implementation methods.

O Farm operation O Food safety O Environmental sustainability O Worker safety O Human rights and welfare

This document lists important control points throughout the production process of agricultural produce and is divided into three areas: basic farm management, resource management, and cultivation process management. For each area, important control points related to the above five topics are listed. These control points address the minimum standard for common issues among producers and are designed to respect the different methods and characteristics of each producer. By implementing farm management that complies with the ASIAGAP control points, a producer can achieve good practices on all five of the above topics.

Moreover, by implementing ASIAGAP, a farm can achieve a sufficient level of farm management to be internationally recognized and establish trust and close relationships with buyers and consumers.

ASIAGAP is a management method for agricultural production processes, which a producer can voluntarily implement. It allows producers to establish an operation management system with which they can continuously improve their farm management through self-assessments. It is a scientific approach to improving food safety, and producers can implement it as a scheme of quality control. ASIAGAP also establishes a sustainable farm operation based on environmental conservation, including biodiversity conservation. It contributes to improving productivity through appropriate and effective farm management.

Through its third-party audit and certification system, ASIAGAP allows certified producers to demonstrate to society that they are credible producers or producer groups that are executing good farm management.

2. How to use this document

There are two ways to use this document. The first is to use it as a reference document for an agricultural producer or top management of a producer group to improve the management of the farm or the producer group. This document will contribute to achieving good and effective farm/group management.

The second way is to show society the compliance with this document through third-party verification (ASIAGAP audit and certification) to prove that the farm/group is achieving good management. The ASIAGAP certification is recognized as a sign of farm credibility in the agricultural supply chains.

This document consists of three parts, and the parts that a farm needs to implement depend on the farm. Please see the following table to see which part applies.

Product	A - C: Basic control points	D: Control points for sprouts only	E: Control points for mushrooms only
Fruits and vegetables except for sprouts and mushrooms	0		
Sprouts	0	0	
Mushrooms	0		0

<Elements of the content pages>

(1) Number

Each control point has its number. In the ASIAGAP standard documents for "Fruits and vegetables," "Grains," and "Tea," the control points with the same content are designated with the same numbers.

(2) Level

Control points are categorized into "Major Must," "Minor Must," and "Recommendations" according to their level of importance (ref. "8. Terms and Definitions" for the definition of each level). The required conformity percentages for each level are stipulated in "4. Summary of procedures up to certification."

(3) Control points

Control points are the checkpoints that are necessary to manage agricultural production processes.

(4) Compliance criteria

These criteria comprise a desirable state of farm management for each control point and objective criteria for evaluation. When a conformity criterion contains (1), (2), and (3), unless the criterion says "(1), (2), or (3)," (1) to (3) should all be observed.

(5) Result column

This is a column that can be used to check applicability or conformity during a self-assessment or an audit. A control point can be checked and defined to be "Conformity," "Non-conformity," or "Not applicable." For example, "Conformity" can be checked as "O," "Non-conformity" can be checked as "X," and "Not applicable" can be indicated by "-" in the column.

3. Flow of an ASIAGAP audit and certification

The ASIAGAP standards consist of the following three documents.

- (1) ASIAGAP General Regulations
- (2) ASIAGAP Control Points and Compliance Criteria for Farms
- (3) ASIAGAP Control Points and Compliance Criteria for Group Administration

Please see the following "Summary of procedures up to certification" for the steps of implementation. Please see the ASIAGAP General Regulations for the detailed rules.

4. Summary of procedures up to certification (please see the "ASIAGAP General Regulations" for the detailed rules).

1. Steps for an individual farm audit and certification

- (1) Read and understand the "ASIAGAP Control Points and Compliance Criteria for Farms."
- (2) Establish procedures based on the "ASIAGAP Control Points and Compliance Criteria for Farms" and implement them.
- (3) Conduct a self-assessment and correct non-conformities.
- Apply to the ASIAGAP audit and certification body for an audit and receive an audit. All the control points need to be audited, and each will be evaluated as "Conformity," "Non-conformity," or "Not applicable."
- (5) Take corrective actions for the non-conformities identified, and send the report on the corrective actions to the audit and certification body.
- After a certification decision meeting by the audit and certification body, the farms that meet the following conformity level will be granted ASIAGAP certification.

100% conformity with the applicable Major Must
More than 95% conformity with the applicable Minor Must
of the "ASIAGAP Control Points and Compliance Criteria for Farms"

2. Steps for a group audit and certification

Read and understand the "ASIAGAP Control Points and Compliance Criteria for Farms" and the "ASIAGAP Control Points and Compliance Criteria for Group Administration."

Develop a "Group/farm management manual" based on the "ASIAGAP Control Points and Compliance Criteria for Farms" and the "ASIAGAP Control Points and Compliance Criteria for Group Administration," and implement it.

Conduct an internal audit and take corrective actions. An internal audit needs to be conducted for the group administration, all the produce handling facilities of the group, and all the group's member farms.

Apply to the ASIAGAP audit and certification body for an audit and receive an audit. All the control points need to be audited, and each will be evaluated as "Conformity," "Non-conformity," or "Not applicable." Farm audits are conducted for sample farms. (The number of samples needs to be more than the square root of the total number of members.)

Take corrective actions for the non-conformities identified, and send the report on the corrective actions to the audit and certification body.

After a certification decision meeting by the audit and certification body, the groups that meet the following conformity level will be granted ASIAGAP certification.

100% conformity with the applicable Major Musts
More than 95% conformity with the applicable Minor Musts
of the "ASIAGAP Control Points and Compliance Criteria for Farms"

100% conformity with the applicable control points of the "ASIAGAP Control Points and Compliance Criteria for Group Administration"

5. Copyright

This document has been developed by the Japan GAP Foundation, and its copyright belongs to the Japan GAP Foundation. When any entity intends to produce a secondary document derived from this document, the entity needs to acquire an authorization from the Japan GAP Foundation in advance.

6. Disclaimer

The Japan GAP Foundation and the ASIAGAP audit and certification bodies do not hold legal responsibility for the agricultural produce sold by the certified farms and groups.

7. Terms and definitions (please also see the "ASIAGAP General Regulations")

Note: When laws are quoted, unless otherwise specified, they are Japanese laws.

English abbreviations

- (1) Additives: Inorganic substances and inorganic substance groups, such as calcium sulfate, that are considered to help mushroom mycelium in absorbing its main nutrient sources.
- (2) Agricultural produce: When crops are harvested from the farm, the harvested products are no longer called "crops" but are called "agricultural produce."
- (3) Application timing (pre-harvest intervals, etc.): Permitted timing of each agrochemical application.
- (4) ASIAGAP (ASIA Good Agricultural Practice): ASIAGAP is one of the GAP schemes developed by the Japan GAP Foundation, and it contains good farm management practices from the perspectives of farm operation, food safety, environmental conservation, workers' safety, human rights, and welfare, in the context of the production circumstances of Japanese agriculture and GFSI benchmarking requirements.
- (5) ASIAGAP General Regulations: Document that provides the principles of ASIAGAP; a general overview of the scheme, rules, and procedures for the ASIAGAP audits and certifications; the ASIAGAP logo display; and relationships with other GAP schemes.
- (6) ASIAGAP trainers: Those who have taken the ASIAGAP trainers basic course that is approved by the Japan GAP Foundation, passed the final exam, and maintained registration status as ASIAGAP trainers.
- (7) CCP(Critical Control Point): The most important control points in the production process, CCPs are indispensable at each stage of agricultural production to prevent food poisoning. CCPs need to be controllable processes that allow producers to reduce or eliminate food safety hazards.
- (8) Certification: The act conducted by an audit/certification body that proves that a farm's management system or a group's administration complies with a certain standard.

- (9) Close call: Cases that could have led to an accident that give one a chill or a shock. It reminds one to prevent accidents in advance.
- (10) Compliance criteria: Criteria for objective judgment regarding good farm management.
- (11) Compost: One type of "special fertilizer." Straw, rice husks, barks, animal waste, and other animal-based or plant-based organic matter (except for sludge and organs of fish and shellfish) that have been deposited, stirred, and decomposted (including those that contain urea, ammonium sulfate, or other materials that promote decomposition). (ref. Japanese laws and regulations: Notification of the Ministry of Agriculture. Fishery Forestry. "special fertilizer" based on the Fertilizer Control Law)
- (12) Control method: Activities that allow one to reduce or to eliminate hazards to the minimum acceptable level.
- (13) Control points: Points that should be respected from the five standpoints of farm operation, food safety, environmental conservation, workers' safety, welfare, and human rights.
- (14) Critical limit: Criterion that separates acceptability from unacceptability. Critical limits are established to determine whether a CCP remains in control. If a critical limit is exceeded or violated, the products affected are deemed to be potentially unsafe. (ref.
- (15) Crop: Plants that are under cultivation in the field. It does not refer to the produce that has been harvested.
- (16) Cross-contamination: Microbiological contamination, agrochemical contamination, or contamination by foreign matters caused by the activity of workers, machinery, equipment, water, and air.
- (17) Cultivation process: Production activities in the field except for harvesting, such as sowing, nursery, transplanting, fertilizer application, agrochemical application, skiffing, and pruning.
- (18) Disinfection: Using chemical or physical methods to reduce microorganisms of agricultural produce to ensure safety (according to the Codex General Principles of Food Hygiene).
- (19) Drift: Spread of applied agricultural chemicals over non-targeted objects.
- (20) Facility: All buildings, infrastructure, and equipment that are used for farm operation. It includes storage, produce handling facility, infrastructure for electricity, fuel, gas, water (including sewage), compressed air, resting/eating/smoking places for workers, and toilets.
- (21) Farm management system: A system that is necessary to implement sustainable farm management, which is the philosophy of ASIAGAP. A farm management system needs to be documented in a "Farm Management Manual" by each farm, and it should be effective and efficient.
- (22) Farm: A management entity that conducts the production of agricultural produce, has the legal ownership of the agricultural produce, and has a unitary management system. A unitary management system means that it is run under the same capital and management structure.
- (23) Fertilizer: Substances that are applied to the soil for plant nutrition and to induce chemical changes in the soil that support plant growth, as well as substances that are applied on the leaves of plants with the objective of contributing to the plant nutrition.

- (24) Fertilizers, etc.: In this document, the term "fertilizers, etc." also include soil conditioner, soil revitalizer, plant strengthener, foliar fertilizer, compost, mulching materials (rice straw, weeded grass, wood barks, etc.) and other inputs (inputs that have a fertilizing effect but are not registered, plant revitalizers, repellents, etc.).
- (25) Flow diagram: A process chart required in procedure 4 of HACCP establishment, which shows the stages of the production process and their connections. It describes a series of activities, starting from the receipt of inputs (water, soil, materials, etc.) used in the production process to product shipment, and it is an important document that becomes the basis for hazard analysis.
- (26) Food defense: Activity to prevent intentional contamination of food.
- (27) Food fraud: Conducting any fraud against food. This includes disguised production origin, disguised ingredients, disguised expiration date, disguised edibility, etc.
- (28) Food manufacturing water (Potable water): Water that can be used for food manufacturing, such as tea processing (defined in the manufacturing, processing, and cooking standards for food category 1-B of the standards and criteria for food and food
- (29) Food safety hazard: Biological, chemical, or physical substances in food or the state of food that could potentially affect human health (ref. ISO 22000: 2005). For example, it includes biological hazards (e.g., pathogenic microorganisms), chemical hazards (e.g., heavy metals, chemical residue, and molds), physical hazards (e.g., foreign matters such as metal pieces and glass pieces). radioactive substances. and allergens. It refers to presence, growth, or survival of these hazards in food.
- (30) Food Safety Management System: A system for establishing policies and goals regarding food safety and achieving such goals.
- (31) Food safety: The concept that food, when prepared and eaten in the intended manner, will not harm the health of consumers. (ref. ISO 22000: 2005)
- (32) Food: Under ASIAGAP, food refers to all edible and drinkable items.
- (33) Foreign matter: Objects that are not supposed to be contained in agricultural produce.
- (34) Fruits and vegetables: Agricultural produce that includes vegetables, fruits, mushrooms, and sprouts. Refer to the ASIAGAP Standard Item List for details.
- (35) GAP(Good Agricultural Practice): Good Agricultural Practice refers to the standard that a producer should comply with during agricultural production and its implementation. It has various translations in Japanese.
- (36) General requirements: A comprehensive representation that should be implemented under multiple control points. Corresponding control points are 1.3.1 Food safety management system, 4.1 Prerequisite program, and 5.1 HACCP based system.
- (37) Government: This refers to the national government and local governments.
- (38) Group administration: An administrative body that is set up within a group to govern the organization based on the ASIAGAP requirements.
- (39) Group audit and certification: audit and certification of both the state of group governance by the group administration and the state of management of the agricultural production processes by member farms.
- (40) Group: Organization that consists of multiple farms that are subject to the principles and missions of the group, and which has a representative and group administration.

- (41) HACCP (Hazard Analysis and Critical Control Point): A system to identify food safety hazards, evaluate them and control them (based on the general principles of the Codex Alimentarius).
- (42) HACCP-based system: A system that utilizes HACCP for food safety risk management of the entire process of agricultural production.
- (43) Harm: Damages that can be caused to human health, properties, or the environment. (ref. ISO/IEC Guide 51:2014)
- (44) Harvest lot: The minimum unit of harvesting that can be considered as the same produce. For example, a harvest lot can be defined with a plot number, a harvesting date, or a lot number.
- (45) Harvesting process: Activities including harvesting, trimming/packaging/temporary storage of harvested produce on site, and loading/transportation/delivery of harvested produce from the sites to the produce handling facility.
- (46) Hazards: Substances or conditions that can cause food accidents, environmental contamination, or work-related accidents. Refer to (54) for the definition of food safety hazards.
- (47) Hygiene: In this document, hygiene refers to food hygiene. Food hygiene consists of knowledge and technologies used to keep food in a safe state and prevent any hygiene hazard from eating and drinking.
- (48) ILO convention: Convention that has been established by the International Labor Organization (ILO). ILO is a specialized agency of the United Nations tasked to improve working conditions. It sets international norms regarding employment, salary, working hours, and health and safety of workers and encourage its member countries to ratify the norms.
- (49) Individual farm audit and certification: When a single farm (whether a corporate entity or a personal entity) goes through an ASIAGAP audit and gets certified.
- (50) Integrated Pest Management (IPM): Integration of appropriate methods to control the occurrence and growth of pests, diseases, and weeds, evaluating all available crop protection techniques while considering the economic threshold. It aims to reduce risks to human health and damage to the environment or keep them to a minimum. It aims to avoid disturbances of ecosystems by agriculture and tries to take maximum advantage of the natural mechanism of pest/disease/weed control by natural ecosystems. It contributes to the stable production of safe agricultural produce that can be trusted by consumers.
- (51) ISO (International Organization for Standardization): An organization that sets international standards. The standards that are established by the ISO are used to demonstrate the international credibility of product quality, management of factories, certification bodies, and laboratories.
- (52) ISO17025: Standard set by the ISO that stipulates requirements regarding the competence of laboratories and calibration schemes. The laboratories that are certified under this standard are considered to be internationally credible.
- (53) Laws and regulations: All types of laws and regulations that are established by the government. In this document, they refer to constitutions, treaties, laws, decrees, cabinet orders, ordinances, directives, announcements, and guidelines.
- (54) Major must: Control points that are most important and critical for legal conpliance and food safety.

- (55) Maximum residue limit: Based on the Food Sanitation Act, this refers to the maximum level of agricultural chemicals that could be allowed to remain on the food produce, which do not affect human health.
- (56) Minor must: Control points with which conformity is strongly required.
- (57) Minors: Those who are under 18 years old. (ref. Japanese laws and regulations: Labor Standards Law)
- (58) Monitoring: Conducting a series of observations or measurements to determine whether the management procedures established for the CCP (Critical Control Points) are operating as intended (ref. ISO 22000: 2005).
- (59) Mushrooms: Generic term referring to edible mushrooms, including Shiitake, Enokitake, Eringi, and Bunashimeji.
- (60) New site: Site that has started being used in the past year or a site that is planned to be used in the future.
- (61) Non-conformity: The state in which a farm/group does not meet an ASIAGAP Compliance Criterion.
- (62) Not applicable: Control points that are not applicable to the farm. For example, 7.1.1 (agreement with subcontractors) would be not applicable for a farm that does not have any subcontractor.
- (63) Nutrients: The most important raw material as a nutrient source of mushroom mycelium. It includes grains, agricultural produce processing residue, agricultural produce fermentation residue, and extracted parts of grains (e.g. fats and germs).
- (64) Organizational chart: A chart that clearly shows top management and the responsible person for each activity (personal names must be specified).
- (65) Pathogenic microorganisms: Bacteria, fungi (yeast, mold, etc.), Rickettsia, and viruses that cause infections in human bodies.
- (66) Plant residue: Portions of the harvest that are discarded or branches/stems/leaves/roots that are removed during cultivation or after harvesting. This can also be called crop residue.
- (67) Post-harvest agrochemicals: Agrochemicals that are used after harvesting, during the transportation or storage of agricultural produce. In Japan, they are categorized as food additives. In this document, post-harvest agrochemicals are categorized as agrochemicals.
- (68) Prerequisite program: Basic conditions and activities that are necessary to maintain a hygienic environment throughout the food chain that is suitable for the production, handling, and provision of safe products and safe food for human consumption (ref. ISO 22000: 2005).
 - For example, it includes basic conditions and activities regarding the site, location, and construction of facilities; internal layout of the facilities; management of water, soil, atmosphere, energy, waste, and wastewater; suitability of machinery, equipment, and tools and their ease of maintenance, cleaning, and washing; management of purchased inputs; produce handling; prevention of cross-contamination; cleaning, washing, sterilization, disinfection, prevention and control of pest infestation; personnel and visitor hygiene; etc.
- (69) Procedure: Order of conducting or setting up activities.

- (70) Process: A series of interrelated or interactive actions that use inputs to produce the intended outputs. Note: Inputs and outputs may be tangible (e.g., materials, parts, and equipment) or intangible (e.g., data, information, and knowledge) (ref. ISO 9001: 2015).
 - Process can also be applied to business activities, such as product development, sales, and purchasing; to resource management activities, such as education, training, and machinery maintenance; and to business management activities, such as policy management, auditing, and management review. The inputs in the agricultural production process correspond to materials, such as soil, water, propagation materials, agrochemicals, and fertilizers. The outputs correspond to agricultural products, byproducts, waste, etc.
- (71) Produce handling process: This refers to the process, including loading of agricultural produce into the handling facility, storage, sorting, trimming, washing, simple cutting, drying, processing, packing, and shipment from the facility (loading, transportation, and delivery).
- (72) Product complaint: To receive a complaint from a client due to a product defect.
- (73) Product defect: State of a product that does not allow normal sales, such as abnormal taste or smell, spoiling, deficient quantity, labeling mistakes, etc.
- (74) Product: Agricultural produce that is ready to be sent to a buyer from a farm or a group.
- (75) Production process: Series of production activities including the cultivation process, harvesting process, and produce handling process.
- (76) Protective clothing: Clothing used to protect a body from chemicals during agrochemical mixing and application.
- (77) Protective equipment: Equipment, other than clothing, that is used to protect a body from chemicals during agrochemical mixing and application. It includes hats, goggles, chemical-filtered masks, gloves, and rubber boots.
- (78) Recommendations: Control points that do not affect the audit result, but the implementation of which is encouraged to achieve ideal farm management.
- (79) Registered laboratories: Laboratories that are registered with the Ministry of Health, Labour and Welfare. There are certain standards for registration, and analysis results of the registered laboratories are generally considered to be officially recognized and credible.
- (80) Risk assessment: Analysis of the seriousness of the risks.
- (81) Risk: Combination of the probability of a potential hazard and the degree of its harm. (ref. ISO/IEC Guide 51: 2014)
- (82) Self-assessment: Assessing and verifying your own farm management, using the "ASIAGAP Control Points and Compliance Criteria for Farms."
- (83) Site: Land that is used for crop cultivation or infrastructure for crop cultivation, such as a greenhouse.

- (84) Soil analysis: Comprehensive analysis of the state of the soil of a site with the purpose of improving crop productivity and quality, improving the efficiency of agricultural activities, and calculating the appropriate fertilizer quantity and soil conditioners.
- (85) Soil Contamination Areas: Areas designated by Article 5 Paragraph 1 of the Soil Contamination Countermeasure Law, the Agriculture Land Soil Contamination Countermeasure Areas designated by Article 3 Paragraph 1 of the Agricultural Land Soil Pollution Prevention Law, and the Dioxins Countermeasure Areas designated by Article 29 Paragraph 1 of the Law on Special Countermeasures against Dioxins.
- (86) Sprouts: Vegetables that are eaten in the form of freshly-germinated shoots. They include radish sprouts, soya bean sprouts, and pea sprouts.
- (87) Standard fertilization: Standard doses and application methods of fertilizers set by the government.
- (88) Traceability: The ability to trace a shipped product to the producer and to the site from which the product was harvested. Subsequently, one can trace the records of the site to identify the planting materials, fertilizers, and agrochemicals used to produce the product.
- (89) Verification: Confirmation, through the provision of objective evidence, that specified requirements have been fulfilled. (ref. ISO22000:2005)
- (90) Violation of rules by a farm/group: The state in which a farm/group violates the rules based on the "ASIAGAP Control Points and Compliance Criteria for Farms" and the "ASIAGAP Control Points and Compliance Criteria for Group Administration" and/or the rules set forth in the "ASIAGAP General Regulations."
- (91) Waste: Garbage, bulky waste, cinders, sludge, manure, waste oil, waste acid, waste alkali, animal carcasses, and other wastes in a solid or a liquid form (except for radioactive substances and things that have been contaminated by radioactivity). (ref. Waste Management and Public Cleansing Law, Article 2, Paragraph 1)
- (92) Wastewater: Water that is discarded because it has been contaminated with foreign matter and harmful substances after use. For example, it includes wastewater from factories and graywater.

No.	Level	Control Point	Compliance Criteria	Result	Comment				
A. Ba	A. Basic farm management								
1. Vis	suali	ization of farm	management						
1.1	Major	Scope	The latest information about the following applicable scope is documented. (1) Farm (farm name, address, contact numbers) (2) Product (name of the produce and item that are under cultivation or are planned for cultivation) (3) Production process category (4) Site (name, address, area size, crop) (5) Storage (name, address, and materials stored, such as agrochemicals, fertilizers, fuels, machinery, etc.) (6) Produce handling facility (name/identification, address, items handled) (7) Subcontractors (name, process outsourced, address, contact numbers)						
1.2		Map of sites and facilities	There is a map that indicates the sites and facilities of the farm. It should also indicate the areas surrounding the farm.						
1.3	/ajo	Farm management system	A farm management system has been established and documented in a farm management manual, which stipulates how to implement the farm management required by ASIAGAP.						

No.	Level	Control Point	Compliance Criteria	Result	Comment
1.3.1	Major	Food safety management system (general requirements)	As part of the farm management system, a food safety management system has been established based on the safety risk of agricultural products, and it is implemented, maintained and continuously improved. The food safety management system complies with the following items: (1) The scope of the food safety management system is defined. (2) It complies with the laws of food safety. (3) It identifies the processes needed for the food safety management system. (4) It determines the sequence and interaction of these processes. (5) It determines the criteria and methods required to ensure the effective operation and control of these processes. (6) It ensures the availability of resources and information necessary to support the operation and monitoring of these processes. (7) It measures, monitors, and analyzes these processes and implements actions necessary to achieve planned results and continuous improvement. (8) It includes a implementation of verification procedure of the food safety management		
1.4	Major	Issuance of a farm management manual	A farm management manual is developed or revised, according to the following procedures. Implementation of the procedures can be confirmed through records. (1) The manual is developed per the instructions of the farm manager. (2) The manual has been verified by a person who fully understands ASIAGAP. (3) The manual has been approved by the farm representative.		
1.5	Major	Revision of a farm management manual	(1) The farm manager revised the content of the farm management manual at least once a year.(2) Top management supports the improvements of the farm management manual and keeps its content recorded.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
1.6	Major	Management of the latest version of a farm management manual	When a farm management manual is revised, the following actions are conducted. (1) The old version and the new version are clearly identified. (2) The changes have been explained to the workers.		
2. Res	spo	nsibilities of to	p management		
2.1	Major	Responsibilities and authorities	 (1) There is an organizational chart that clarifies the following responsible persons: Top management Farm manager (a person who is in charge of site management) Person responsible for product management (a person who can respond to cases of abnormalities and complaints regarding product and food safety issues) Responsible personnel for produce handling facility (a person who is responsible for the operation of produce handling facilities) Responsible personnel for fertilizer management (a person who is responsible for selection, planning, applications, and storage of fertilizers) Responsible personnel for agrochemical management (a person who is responsible for selection, planning, applications, and storage of agrochemicals) Responsible personnel for worker safety (a person who is responsible for preventing injuries and accidents during work) Responsible personnel for labor management (a person who is responsible for the working environment within the farm, welfare, and working conditions, such as working hours, rest periods, holidays, and wages) Top management has provided enough authority to the above responsible personnel, and made clear to each person the control points in that document for which he/she is responsible. Top management has ensured that all the staff understand who is responsible for each area.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
2.2	Minor	Policy	 (1) Top management has documented the farm's policy statement. This policy includes food safety policy, legal compliance, and continuous improvement of the farm management. (2) Top management has ensured that all staff in the farm understand the above principles and objectives. 		
2.2.1	_	Food safety objectives	"Top management has set measurable objectives with regard to the food safety policy mentioned in Control Point 2.2.		
2.3	Major	Implementation of internal audits	 (1) ASIAGAP internal audits are conducted at least once a year by a person who sufficiently understands ASIAGAP, and the results are recorded. (2) As a result of the internal audits, corrective actions are taken on non-conformity, and these actions are recorded. 		
2.4	Minor	Management review	 (1) Top management reviews the effectiveness of the farm management system at least once a year, based on the result of the self-assessments (or the result of the internal audits in the case of a group), and communicates necessary improvements to the corresponding responsible personnel, as necessary. (2) Instructions on improvements given to the responsible personnel are recorded. 		
2.4.1	Recom.	Progress in achievement of food safety goals	Top management conducts revision of the farm management system (Control Point 2.4), based on the progress in achievement of food safety goals (Control Point 2.2.1).		

No.	Level	Control Point	Compliance Criteria	Result	Comment
2.4.2	Major	Identification and provision of management resources	Top management determines and provides, in a timely manner, the qualified resources (including suitably qualified personnel) that are necessary to implement, maintain, and improve the farm management manual, which includes the food safety system.		
2.4.3	Major	Review of the HACCP based system	Top management revises the HACCP-based system, which is stated in Control Point 5.1, at least once a year to ensure its continuing applicability, suitability, and effectiveness. In the event of any change that impacts food safety, top management reviews the HACCP based system and food safety management procedures, including the prerequisite programs. The review includes analysis of the farm management manual and food safety goals, which are part of the food safety management system.		
2.5	Minor	Protection of intellectual properties	(1) When new technologies, new varieties, or new product brands are developed by the farm, they are protected and utilized as intellectual properties of the farm.(2) The farm does not infringe upon intellectual properties of others, such as registered varieties.		
3. Pla	nni	ng and evaluati	on		
3.1	Major	Production planning	The field manager has developed a documented production plan that includes the following. (1) Activities and their timing (2) Estimated yield per item (3) Goal regarding productivity		

No.	Level	Control Point	Compliance Criteria	Result	Comment
3.2	Major	Records of activities	Activities on the sites and in produce handling facilities are recorded. The records contain the following items: - Date - Operator name(s) - Activity - Application machinery		
3.3	Major	Maintenance of records	 (1) There is a documented management procedure to securely store the records required by ASIAGAP. (2) The records required by ASIAGAP are kept in the manner defined in (1), effectively controlled, and stored for at least the past two years. For the first audit, the records of the past three months prior to the date of audit are available. After the first audit, the farm continuously keeps records. (3) When a law or customer requires any record to be kept for more than two years, the farm keeps the records according to the requirement. (4) The records required by ASIAGAP can always be viewed promptly as requested. 		
3.4	ecor	Evaluation of the plan and achievements	(1) Implementation of the plan developed in Control Point 3.1. is recorded.(2) The plan and its implementation are evaluated, and the evaluation result is used to develop the next plan.		

No.	Level	Control Point	Compliance Criteria	Result	Comment				
4. Prei	4. Prerequisite program for food safety								
4.1	Major	Establishment of a prerequisite program (general requirement)	The farm has established, implemented and maintained a prerequisite program. The prerequisite program includes items (1)-(11), and at least complies with the corresponding control points. The program has been developed by competent personnel. When necessary, workers have been instructed regarding the rules through work procedures and work instructions (including photos and displays). (1) Sites, location, and construction of facilities (ref. Control Points 17.8, 17.10, and 17.11) (2) Internal layout of the facilities (ref. Control Point 17.7) (3) Water, soil (including substrates), air, energy, etc. (ref. Control Points 16.1, 15.1, and 19.1) (4) Waste and wastewater management (ref. Control Points 20.1, and 16.3) (5) Suitability of the machinery, infrastructure, and equipment, and the easiness of cleaning, washing, maintenance, and preventive maintenance (ref. Chapter 18) (6) Management of purchased materials (propagation materials, agrochemicals, fertilizers, other agricultural materials, packaging materials, etc.) (ref. Chapters 23, 24, and 25 and Control Point 18.3) (7) Agricultural produce handling, including storage and transportation (ref. Control Points 17.4 and 18.1) (8) Prevention of cross-contamination (ref. Control Point 17.5 and 17.6) (9) Contamination, cleaning, washing, sterilization, and disinfection (ref. Control Points 13.3, 18.1, and 20.3) (10) Prevention of entry of pests and their control (ref. Control Point 17.1) (11) Hygiene of workers and visitors (ref. Control Points 13.1 and 13.2)						
4.2	Ma	Verification and maintenance of the prerequisite program	(1) The prerequisite program implemented under Control Point 4.1 is verified and modified according to changes in the work environment.(2) The above verification and modifications are recorded.						

No.	Level	Control Point	Compliance Criteria	Result	Comment				
5. Ris	5. Risk management of food safety in production process								
5.1	Major	HACCP based system (general requirement)	Top management develops a HACCP based system that includes a prerequisite program based on the seven principles and 12 procedures of HACCP and the relevant laws. The system is developed in accordance with the HACCP development methodology of the Codex Committee (Codex Alimentarius Recommended International Code of Practice – General Principles of Food Hygiene CAC/RCP1-1969, Rev 4 -2003, and Guidelines for its Application). Under the above system, Chapters 4 and 5 are implemented to ensure that application of agricultural inputs is managed properly to minimize the potential for microbial or chemical contamination that may adversely affect the safety of the produce. The system includes a standard work procedure manual and work instructions as necessary. The results of a risk assessment demonstrate that the food safety management is effective.						
5.2	Major	Organizing a HACCP team	The person responsible for product management set up a HACCP team and conducts food safety risk management in the production process, as defined in Chapter 5. The HACCP team consists of persons with diverse knowledge and experience in the field of food safety. The team may seek advice from external experts. * In the case of a producer group, a HACCP team for the group can manage all producers in the group.						

No.	Level	Control Point	Compliance Criteria	Result	Comment
5.3	Major	Clarification of product specifications	The following product specifications are recorded for each product or product group. (1) Product name or product group name (2) Inputs of adequate quality for the intended use (soil, water, propagation materials, other agricultural materials, etc.) (3) Cultivation, trimming, and shipping method (4) Intended use and targeting users for food safety (5) The minimum acceptable level of food safety hazards of agricultural products (when there are official standards/criteria or requirements of clients regarding agricultural chemical residue, radioactive materials, heavy metals, microorganisms, foreign matter, etc.) (6) Storage condition, shelf life, and delivery condition (7) Content of leveling		
5.4	Major	Clarification of production process	 (1) The flow diagram of the production process is documented. The flow diagram shows the connection of the production process and inputs, as identified in Control Point 5.3(2), used at each step. (2) The flow diagram has been verified on site and is accurate. The results of the verification are recorded. 		
5.5	Major	Identification of food safety hazards	Based on the flow diagram in Control Point 5.4, the potential food safety hazards are identified and listed.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
5.5.1		Identification of food safety hazards specific to certain items	When the farm produces any of the following items, the farm has considered the produce-specific food safety hazards. (1) Apples and pears - Patulin (mycotoxin) contamination during the harvesting and handling process (2) Vegetables that are consumed raw - Pathogenic E. coli contamination during the harvesting and produce handling processes		
5.6	Major	of food safety	 (1) Risk assessment of the food safety hazards identified under Control Point 5.5 has been conducted. (2) Risk assessment of the food safety hazards has been conducted by taking into consideration the likely occurrence of food safety hazards and the severity of their adverse health effects. If a risk assessment was required by other control points, the result of the risk assessment has been used. 		

No.	Level	Control Point	Compliance Criteria	Result	Comment
5.7		Identification of management process and implementation method	(1) Management methods are identified to eliminate or reduce food safety hazards including contamination, based on the risk assessment conducted under Control Point 5.6. A single management method can address more than one hazards. (2) The management method to control food safety hazards that have been considered high risk in Control Point 5.6 is defined as a CCP (Critical Control Point) when it is indispensable for eliminating or reducing food safety hazards to below the minimum acceptable levels. A management method can be defined as a CCP only when settled monitoring indicators and their critical limit can be monitored. A CCP has been defined by taking into consideration a post-process that can eliminate or reduce food safety hazards to below the minimum acceptable level. (3) For the CCPs defined in (2), the process to be managed, the food safety hazards, the management methods, and the monitoring system (monitoring indicators, critical limit, monitoring frequency, monitoring procedure, responsible personnel, monitoring equipment if used, monitoring records, and measures taken in case of exceeding the critical limit) are documented as an operational plan. (4) Before operating the management methods identified in (3), their effectiveness is validated and recorded to ensure that they can eliminate the food safety hazards or reduce them to below the allowed limits.		
5.8	Major	Implementation of the management methods	(1) The management methods established under Control Point 5.7 are implemented. (2) When the monitoring of CCPs based on Control Point 5.7 (3) detects that the critical limit has been exceeded, countermeasures are taken according to the CCP operational plan.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
5.9	Major	Verification of the management methods	 (1) The procedures (methods, responsible personnel, frequency, and records) to verify that implementation of the management methods according to Control Point 5.8 is effective are documented. (2) Verification based on (1) is carried out and recorded. (3) As a result of the verification, countermeasures are implemented and recorded when the implementation of the management methods is not effective. The countermeasures include a review of the management methods and their implementation. If they affect product safety, the procedures for handling nonconforming products in Control Point 8.3 and for handling complaints and abnormalities of products in Control Point 9.1 are implemented. 		
5.10	Major	Review of the food safety risk management	(1) The food safety risk management in Control Points 5.2 to 5.9 is reviewed and updated by the HACCP team at least once a year and when changes of the production process that affect food safety of products occur. (2) The results of the review conducted under (1) are recorded and reflected in a review of the HACCP-based system under Control Point 2.4.3.		
6. Foo	d d	lefense and foo	d fraud mitigation		
6.1	Minor	Food defense	 (1) Potential threats related to food defense, such as contamination of crops, agricultural products, water, soil, and materials, etc., by foreign matter and pollutants are identified, and a procedure for the food defense assessment to prioritize measures against the threats is documented, implemented, and recorded. (2) The plan that includes measures to mitigate the identified threats is documented. (3) This plan (the food defense plan) is incorporated into the food safety management system and is being implemented. 		

No.	Level	Control Point	Compliance Criteria	Result	Comment
6.2	Minor	Food fraud mitigation	 (1) Falsification of records and displays of agricultural products and intentional contamination are identified, and a procedure to prioritize potential food fraud vulnerability is documented and implemented. (2) A plan that includes measures to mitigate the food safety risks from food fraud vulnerabilities is documented. (3) This plan (the food fraud mitigation plan) is incorporated into the food safety management system and is being implemented. 		
7. Su	ppli	ier managemen	t		
7.1 Ma	ana	gement of subc	contractors		
7.1.1	Major	Agreement with the subcontractors	There is a contract between the farm and the subcontractors. The contract document includes the following items. (1) Name, address, and contact information of top management (2) Name, address, contact information, and representative of the subcontractor (3) Process that has been outsourced and the food safety rules regarding the process (4) Agreement to follow the rules set by the farm regarding (3) (5) Agreement regarding sanctions in case of a violation of the contract (6) Agreement regarding receiving inspection by the external entity and taking corrective		

In cases where it is not possible for the farm and the subcontractor to sign a contract document, the farm can alternatively confirm the documents disclosed publicly by the subcontractor, including their terms and conditions, with validating that there is no

actions, in case non-conformities are detected.

adverse effects to food safety.

No.	Level	Control Point	Compliance Criteria	Result	Comment
7.1.2	Minor	Verification of the subcontractors	The farm verifies the subcontractor's compliance with the rules established in the contract (ref. Control Point 7.1.1) at least once a year, and the result is recorded. The record contains the following information. (1) Name of the subcontractor (2) Verification date (3) Name of the verifier (4) Non-conformity (5) Requests for corrective actions or implementation of corresponding sanctions In cases in which the subcontractor is already certified by ASIAGAP or another third-party certification scheme recognized by the ASIAGAP Association, the farm can alternatively confirm the subcontractor's certificate with its scope and validity, instead of conducting verification.		
7.2 Ma	ana	gement of supp	liers and service providers		
7.2.1		Assessment and selection of laboratories	The farm confirms that the laboratory that conducts food safety analysis of agrochemical residue, water quality, heavy metals, microorganisms, and radioactive substances meets one of the following criteria. (1) Registered laboratory of the producing country (2) ISO17025 certified laboratory		

No.	Level	Control Point	Compliance Criteria	Result	Comment
7.2.2	Minor	Assessment, selection, and monitoring of suppliers and service providers	 (1) Procedures for credibility assessment, selection, and monitoring of the following suppliers are documented. 1) Suppliers of water, electricity, gas, fuel, etc. 2) Suppliers of inputs, such as propagation materials, agrochemicals, fertilizers, and packaging materials 3) Suppliers and maintenance service providers of machinery and infrastructure (2) Suppliers are assessed, selected, and monitored based on the procedure defined in (1). This includes emergency procurements. The results of assessment, selection, and monitoring are recorded. When resuming business with certain suppliers, such suppliers are reassessed and selected, and the results of the reassessment the selection are recorded. 		
7.2.3	Minor	Specification of purchasing and provided services	 (1) Documented specifications of purchasing and provided services (including utilities, transport and maintenance) which have effect on food safety are maintained. (2) Documented specifications of the above (1) are securely stored and readily accessible as necessary. (3) A specification review process is in place. 		
7.2.4	Minor	Transactions of Suppliers and Service Providers	(1) The farm confirms if the products or services correspond to the specifications mentioned in 7.2.3, analyze if necessary, and store evidence of receipt.(2) The farm does not make transactions with suppliers or service providers that have not been selected through CPCC7.2.2 (2).		

No.	Level	Control Point	Compliance Criteria	Result	Comment				
8. Pro	. Product inspection and sorting								
8.1	Major	Input/Product inspection	 (1) The farm prepares and implements a system to ensure analysis of inputs that have an effect on food safety. (2) An examination of the item, at least regarding the product specifications clarified in Control Point 5.3, is conducted, and a procedure to ship only the products that conform to the product specifications is documented and implemented. (3) The equipment that is necessary for the above inspection is specified (ref. Control Point 18.2). 						
8.2.1	Major	Response to a nuclear disaster	 (1) The farm follows the government instruction on crop cultivation and product shipment regarding a nuclear disaster, and the farm can demonstrate the safety of its produce through means such as radioactivity analysis. (2) The farm confirms the safety of the soil, water, and fertilizers through the following control points: Control Point 15.1 for soil, Control Point 16.1.1 for water, and Control Point 25.1.3 for fertilizers. 						
8.3	Major	Handling of produce	(1) There is a documented procedure to sort and identify agricultural produce that meets the product specifications from agricultural produce that does not meet the product specifications. The procedure includes the management of agricultural produce that does not meet the product specifications. Products are handled, sorted, graded and packed in a manner that minimizes sources of biological, chemical and physical contamination. (2) According to the procedure in (1), the farm sorts the produce that meets the product specifications and produce that does not meet the product specifications and manages product that does not meet the product specifications. (3) When the produce could significantly affect food safety or food quality, the produce is managed based on Control Points 9.1.1 and 9.1.2.						

No.	Level	Control Point	Compliance Criteria	Result	Comment					
9. Hai	9. Handling of complaints, abnormalities, and violations of rules									
9.1 Ha	9.1 Handling of complaints and abnormalities of products									
9.1.1	Major	Procedures for handling complaints and abnormalities of products	There are written effective incident management procedures for handling the cases of complaints and abnormalities of products, and the following points are clear in the document. Product abnormalities include serious nonconformities related to the safety of harvested produce, agricultural products under preparation, or shipments. (1) Reporting to the person responsible for product management, in the case of complaints and abnormalities of products (2) Analysis of the situation and the impacts (including the decision regarding product recall) (3) Emergency responses (contacting clients that can be affected, consulting and informing relevant institutions, product recall, disposal of products with problems, etc.) (4) Investigation of causes (5) Corrective actions and their completion due dates (6) Reporting to the ASIAGAP audit and certification body, in case the illegalities are founded (7) Verification of the effectiveness of the corrective actions taken (8) The incident management procedures shall be regularly tested.							
9.1.2	~	Handling of complaints and abnormalities of products	The records show that the farm handled complaints and abnormalities of products according to the procedures established in Control Point 9.1.1.							
9.1.3	Minor	Product recall practice run	(1) The farm conducts a practice run for product recall in a case of product complaint or abnormality at least once a year and records the result.(2) Based on the result of the trial, the farm revises the procedures established in Control Point 9.1.1.							

No.	Level	Control Point	Compliance Criteria	Result	Comment
9.2 Ha					
			There are documented procedures for handling cases of the farm's violations of rules, and the following points are clear in the document.		
9.2.1	Major	Procedures for handling the farm's violations of rules	 (1) Analysis of the situation and the impacts (2) Emergency responses (contacting clients that can be affected, consulting and informing relevant institutions, etc.) (3) Investigation of causes (4) Corrective actions (5) Reporting to the ASIAGAP audit and certification body in the case of violations of the General Regulations 		
9.2.2	Major	Handling the farm's violations of rules	The records show that the farm handled cases of its violations of rules according to the procedures established in Control Point 9.2.1.		
10. Pr	odu	ıct identificatioı	n and traceability		
10.1 T	rac	eability			
10.1.1	Major	Product display	The shipped product, invoice, or delivery note contains the following information. (1) Farm name (2) Product name (3) Place of origin		

No.	Level	Control Point	Compliance Criteria	Result	Comment
10.1.1.1	Major	labeling	 (1) The product to be shipped is labeled in accordance with the food regulations of the country of destination. (2) All the products to be shipped that intentionally or potentially include allergic substances are labeled in accordance with the labeling regulations for allergens of the country of destination. 		
10.1.2	Major	Shipping records	There are records that connect the shipped product and its harvest information. The records contain the following information. (1) Shipping/sales destination (2) Shipping date (3) Product name (4) Shipped quantity (5) Harvest lot or storage lot that is linked to the harvest lot		
10.1.3	Major	Harvesting records	There are harvest records that contain the following information. (1) Harvest lot (2) Product name (3) Harvest date (4) Harvested quantity (5) Harvested site		

No.	Level	Control Point	Compliance Criteria	Result	Comment
10.2	/ajo	produce from other farms	(1) If the farm handles produce from other farms, there is a countermeasure to distinguish produce from each farm and to prevent unintentional mixing of produce from the other farms. The countermeasure can be monitored through the records. (2) When the farm conducts sales of the produce from other farms, it uses correct product displays that would not miscommunicate about the farms of origin.		
B. Ma	nag	ement of resou	rces		
11. R	esp	onsible person	nel and training		
11.1	Major	Farm manager	 (1) The farm manager (ref. Control Point 2.1) has been given the authority to manage the farm on behalf of top management. (2) The farm manager conducts the following. 1) He/she understands the latest version of the ASIAGAP documents and shares the updates with the responsible personnel accordingly. 2) He/she is capable of explaining his/her knowledge regarding the ASIAGAP Control Points of his/her work area. 		

No.	Level	Control Point	Compliance Criteria	Result	Comment
11.2	m	Responsible personnel for product management	 (1) The person responsible for product management (ref. Control Point 2.1) oversees the following work. 1) Supervision of the product types and standards (varieties, cultivation methods, etc.) 2) Shipment specifications, including packaging, quantity and weight 3) Management of product displays 4) Ensuring the safety and quality of agricultural produce 5) Handling of product complaints and abnormalities and product recall procedures (2) The responsible personnel for product management conducts the following. 1) He/she is capable of explaining his/her knowledge regarding the ASIAGAP control points of his/her work area. 2) He/she makes an effort to improve his/her knowledge of product management by obtaining qualifications or training from qualified persons. 		
11.3	Major	Responsible personnel for fertilizer management	 The person responsible for fertilizer management (ref. Control Point 2.1) oversees the selection, measurement, application, and storage of fertilizers. The person responsible for fertilizer management conducts the following. He/she is capable of explaining his/her knowledge regarding the ASIAGAP control points of his/her work area. He/she makes an effort to improve his/her knowledge of fertilizer and soil management by obtaining qualifications or training from qualified persons. 		

No.	Level	Control Point	Compliance Criteria	Result	Comment
11.4	Major	Responsible personnel for agrochemical management	 (1) The person responsible for agrochemical management (ref. Control Point 2.1) oversees the selection, measurement, application, and storage of agrochemicals. (2) The person responsible for agrochemical management conducts the following. 1) He/she is capable of explaining his/her knowledge of the ASIAGAP control points of his/her work area. 2) He/she makes an effort to improve his/her knowledge regarding agrochemicals by obtaining qualifications or training from qualified persons. 3) He/she obtains the latest information about agrochemical application standards and can present the information obtained in the past year. 		
11.5	Major	Responsible personnel for worker safety	 (1) The person responsible for worker safety (ref. Control Point 2.1) oversees the work to prevent injuries or accidents on the farm. (2)The person responsible for worker safety implements the following items. 1) He/she is capable of explaining his/her knowledge of the ASIAGAP Control Points of his/her work area. 2) He/she makes an effort to improve his/her knowledge regarding worker safety by obtaining qualifications or training from qualified persons. 3) He/she obtains and understands the latest information about the safe use of machinery and infrastructure. 4) He/she ensures that there is a person who can conduct first aid on the farm and can prove that the person has been trained in first aid. 		
11.6	Major	Person responsible for labor management	 (1) The person responsible for labor management (ref. Control Point 2.1) oversees the work to manage the working environment, welfare, and working conditions on the farm. (2) The person responsible for labor management implements the following items. 1) He/she is capable of explaining his/her knowledge on the ASIAGAP control points of his/her work area. 2) He/she makes an effort to improve his/her knowledge of human rights, welfare, and labor management by obtaining qualifications or training from qualified persons. 		

No.	Level	Control Point	Compliance Criteria	Result	Comment
11.7	Minor	Training of workers	 (1) The responsible personnel listed in Control Point 2.1 conduct training on the corresponding rules on the farm based on the ASIAGAP for all the workers that they supervise, at least once a year. Each responsible person records the training results. The records include the training date, the participants, and the content of the training. The responsible personnel can present the training materials that were used in the training. (2) If there are foreigners among the workers, training is conducted in a manner that they can understand (language, use of illustrations, etc.). 		
11.8	Major	Official qualification or completion of a training course	If there is a worker that is conducting work that requires an official qualification based on a law or completion of a training course, the worker can prove that he/she meets the requirement.		
11.9	Minor	Communications of the rules to visitors	There are documented rules of the farm on the following points that visitors need to respect. The rules are communicated to visitors to draw their attention. If there are foreigners among the visitors, the rules are communicated in a manner that they can understand (language, use of illustrations, etc.). (1) Worker safety (2) Food safety (3) Environmental conservation		

No.	Level	Control Point	Compliance Criteria	Result	Comment
11.10	Recom.	Human resource development	The farm works on the following items to develop farm successors and workers. (1) The farm successors and workers are involved in the documentation process of the farm management (ref. Control Point 1.3) or in the production planning (ref. Control Point 3.1). (2) Evaluation results of the plan and the achievements (ref. Control Point 3.4) and information regarding the farm operation are shared with the successors and workers. (3) Responsibilities and authorities are progressively allocated to the successors and workers.		
12. Hu	ıma	an rights, welfa	re, and labor management	-	
12.1	Major	Proper recruitment of workers	(1) There is a list of workers. The list includes the workers' names, birth dates, sex, address, and employment date. Private information of the workers is managed with confidentiality. (2) When a foreigner is employed, the farm ensures that the person has a valid work visa. (3) The farm does not use "child labor" as defined by the ILO convention or another law that is stricter. Employment of minors abides by the relevant laws. * When the farm is operated only by relatives living together (a family operation), this control point is not applicable. Whether an individual is a worker is determined based on whether labor service is provided under direction and supervision and whether wages are paid for labor service. Those who work temporarily for certain seasons are also considered to be workers.		
12.2	Major	No forced labor	The farm has a mechanism to prevent the following from happening. (1) A worker has been recruited through human trafficking, slave labor, or prison labor. (2) A worker has been forced into labor through assault, intimidation, imprisonment, or other mental or physical means that unduly constrain his/her freedom.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
12.3	_	Communication between the employer and the worker	 (1) There is a meeting between the employer and the worker at least once a year to exchange opinions about the working conditions, working environment, and worker safety. The minutes of the meeting are recorded. (2) There is agreement regarding the right of collective bargaining of an organization, between the employer and the labor union or the worker's representative. If any agreement has been signed by both parties, the agreement is respected. * Not applicable when there is no worker 		
12.4	Major	No discrimination	Decisions on employment, promotion, and salary raises are made based only on the level of competency to conduct the work and are not influenced by race, ethnicity, nationality, religion, or gender.		
12.5	Minor	Disclosure of the working condition	 (1) The employer presents the following points regarding working conditions to a potential worker before employment. 1) Content and location of the work 2) Employment period (if the employment period is limited, the farm needs to present the terms of contract renewal) 3) Working hours, break time, holidays 4) Wage, payment method, payment time 5) Issues regarding dismissal (rights and conditions for dismissal, etc.) (2) When a potential worker is a foreigner, the working condition is communicated in a documented form, in a language that the person can understand. 		

No.	Level	Control Point	Compliance Criteria	Result	Comment
12.6	Minor	Compliance of working conditions	 (1) The working hours, holidays and break times comply with the laws. (2) The wage is not below the minimum wage that is set by the government. When there is no minimum wage set by the government, the wage is not below the amount presented in Control Point 12.5. (3) Extra pay for work at night, overtime, and work on holidays follows the laws. (4) The workers receive their wages within the timeframe presented in Control Point 12.5. (5) There is no unreasonable or excessive deduction from the wage. 		
12.7	Minor	Workers' housing	When the farm provides housing to the workers due to a necessity for labor management, the housing is safe and is equipped with a healthy living environment.		
12.8	Recom.	Agreement for family operation	When the farm is operated only by family members who live together, there is a documented agreement negotiated through family discussions regarding the working environment on which all the family members agree.		
12.9	Recom.	Setting up a working environment	(1) The farm is aware of the physiological needs of the workers and sets up a suitable working environment.(2) The farm is aware of physical burdens and sets up measures to relieve such burdens at the site, storage, and produce handling facilities.		

No.	Level	Control Point	Compliance Criteria	Result	Comment			
13. Hy	13. Hygiene management of workers and visitors							
13.1	Major	Countermeasures against the health issues of workers and visitors	(1) The farm manager implements medical screening of the workers and the visitors who have the possibility of carrying diseases that can be contagious to consumers through agricultural produce before entering a food handling area. The farm manager prohibits the persons indicated in (1) from harvesting and handling agricultural produce, as well as from entering a food handling area.					
13.2	Minor	Rules for the workers and visitors	There are documented rules on hygiene management on the following points. The rules have been communicated to the workers engaged in harvesting and produce handling and to the visitors. (1) Work clothes, caps, masks, shoes, gloves, and personal belongings (2) Hand washing procedure (including hand washing training and frequency), disinfection, and nails (3) Smoking, eating, coughing, sneezing, and spitting (4) Use of the toilet (5) Touching of agricultural produce (6) Personal effects such as jewellery, watches or other items shall not be worn or brought into product harvesting and handling areas.					
13.3 M	lan	agement of hyg	iene facilities					
13.3.1	Minor	Hand-washing facilities	There is a hand-washing facility near the toilet and the produce handling facility. The hand-washing facility is kept hygienic and is equipped with hygienic water (ref. Control Point 16.1.2), soaps, towels, and disinfectants.					

No.	Level	Control Point	Compliance Criteria	Result	Comment
13.3.2	Minor	Set-up and hygiene of the toilets	 (1) There are enough toilets close to the work place. (2) The toilets are regularly cleaned and maintained in a hygienic manner. (3) Any breakage of the toilets that can affect hygiene is fixed. (4) Filth and sewage from the toilets are disposed appropriately and do not contaminate the sites, facilities, or water canals of the farm. 		
14. W	ork	er safety mana	gement and responses in case of accidents		
14.1	Major	Worker safety	 (1) The farm conducts a risk assessment on dangerous places and dangerous activities in the sites, paths, storage, and produce handling facilities at least once a year and documents the countermeasures to prevent accidents or injuries. The risk assessments and the measures take into account the accidents and injuries that have taken place on the farm or in a similar farm or the cases of close calls on the farm. The following dangerous activities are considered in the risk assessments. Loading and unloading using a riding machine, and its use on slopes or steps Use of a tiller Use of a brush cutter on slopes Use of a stepladder The countermeasures established in (1) to prevent accidents or injuries are understood by the workers and are implemented. When there is a change of activities at the sites, storage, or produce handling facilities, the risk assessment and the countermeasures are revised. 		

No.	Level	Control Point	Compliance Criteria	Result	Comment
14.2	Minor	Workers engaged in dangerous tasks	Workers who conduct dangerous activities, as identified in Control Point 14.1, meet the following conditions. (1) They have been sufficiently trained on safety. (ref. Control Point 11.7) (2) They have an official qualification on worker safety when required by law or they are under the supervision of a person with an official qualification. (ref. Control Point 11.8) (3) They are not drunk, drugged, sick, pregnant, minors in age, or disqualified. (4) Elderly workers are given a type of work that takes into consideration their physical or mental limitations. (5) They wear appropriate clothing and equipment for their safety.		
14.3	Minor	Procedures in case of a work accident	The procedures and emergency contacts in case of a work accident are established and communicated to all the workers.		
14.4	Minor	Preparation for accidents	In case of an accident, clean water and a first aid kit are available for immediate use. The content of the first aid kit is sufficient to respond to the risks identified in Control Point 14.1.		
14.5	Major	work injuries	When there is insurance that compensates for work injuries and is required by law, and the farm meets the criteria for its compulsory subscription, the farm carries the insurance.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
14.6	Recom.	Preparation for work injuries (voluntary subscription)	 (1) There is a compensation mechanism for cases in which a worker gets injured at work. (N/A if already subscribed to insurance under Control Point 14.5) (2) There is a compensation mechanism in case top management or family members are injured at work. 		
15. Sc	oil r	nanagement			
15.1	Major	Safety of the soil	The farm conducts a risks assessment on the safety of the soil (including soil dressing, culture soil, and substrates for hydroponics) at least once a year, based on the following information. If any problem is identified, the farm consults a government agency to establish countermeasures. The result of the risk assessment and the countermeasures are recorded. (1) Notification or designation of safety of the soil by the government (2) Condition of the surrounding areas based on Control Point 1.2 and the site history		
15.2	Minor	Soil erosion control	The farm uses cultivation techniques to control soil erosion by wind or water.		
15.3	Minor	Soil conservation	The farm understands the soil characteristics of the sites and conserves the soil for its sustainable use.		
15.4	Recom.	Countermeasures against contaminated water	(1) The farm has a countermeasure to prevent contaminated water from getting inside the site and negatively affecting the soil or the crops.(2) If contaminated water flows into a site, the farm conducts a risk assessment on the safety of the crops and the soil, and takes necessary countermeasures. The farm manages crops that were affected by contaminated water according to government instructions, if they exist. The result of the risk assessment and the countermeasures are recorded.		

No.	Level	Control Point	Compliance Criteria	Result	Comment						
16. U	6. Use of water and wastewater management										
16.1 S	6.1 Safety of the water used in the cultivation process										
16.1.1	Major	Safety of the water used in the cultivation process	(1) The farm understands the type of water used in the cultivation process (tap water, agricultural water, well water, river water, water from reservoir, rainwater, wastewater, etc.), its source, and its storage place. (2) Risk assessment is conducted at least once a year to ensure that the quality of water is suitable for its intended use and the water does not have a negative effect (such as pathogenic microorganisms, heavy metals, agrochemicals, organic solvents, radioactive substances, etc.) on agricultural produce, and necessary countermeasures are taken. The risk assessment considers microbial and chemical contamination. Risk assessment is implemented with the information of i) to iii) shown below, if necessary, a water analysis is conducted to ensure that there is no issue of water quality. The frequency of water analysis is determined by the risk of environmental contamination, which includes water sources and intermittent and temporary contamination (e.g., heavy rain, floods, etc.). 1) The results of the water analysis by the government of the water source, water storage site, and their surrounding areas, or the WHO guidelines for the safe use of wastewater, excreta, and graywater. 2) Purpose of use (irrigation, dilution of agrochemicals, washing after harvesting, etc.) and cultivation stage 3) Conditions of the surrounding areas of the water source and the water storage site (3) The results of risk assessment in (2) (including the results of the water analysis when necessary) and the countermeasures are recorded. (4) Indoor production facilities are properly equipped with clean storing and adequate supplying water system for washing hand, equipments and post-harvest produce.								

No.	Level	Control Point	Compliance Criteria	Result	Comment
16.1.2	Major	Safety of the water used in the produce handling process	The farm conducts hygiene management of the water used for the final washing of produce, the water sprayed on harvested produce as mist, the ice that comes into contact with produce, the water used to wash the machinery or containers that comes into contact with produce, and the water used by the workers for hand washing. The farm conducts water analysis at least once a year, confirms that there is no E. coli in the water, and keeps a record of the analysis results. When the produce is normally consumed raw, the farm uses potable water that has been approved by the government. When any problem is detected, the use of water is suspended, and the farm consults a governmental authority.		
16.1.3	Minor	Hygiene management of stored water and recycled water	 (1) When produce is washed with water kept in a container, the water is constantly flowing. (2) When the water used for washing produce is recycled, the used water is filtered and disinfected and its pH and the concentration of disinfectants are regularly monitored and recorded. The filtering effectively removes solid wastes and suspended solids in the water, and it is conducted regularly. 		
16.1.4		Safety of water used for nutriculture	The farm takes countermeasures to prevent contamination of water used for nutriculture.		
16.1.5	Minor	Water storage	When stored water is used in the production process, measures are taken to prevent the tank, container, or reservoir from becoming a source of contamination of water or agricultural produce.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
16.2	Minor	Protection of water sources	The farm has a mechanism to prevent the intentional or accidental contamination of water sources, water storage places, and water canals that are under its management.		
16.3	Minor	Wastewater management	The farm manages the wastewater from the sites and the produce handling facility and removes the plant residue and the wastes contained in the wastewater, to maintain the quality of water used in the cultivation process.		
16.3.1	Minor	Management of wastewater from culture solution	The farm takes countermeasures to reduce the amount of wastewater coming from the solution of nutriculture or the amount of fertilizers contained in the wastewater.		
16.4	Minor	usage and efficient use of	(1) If there is an arrangement/instruction/approval system imposed by the government or by the local community regarding water use, the farm follows it and contributes to the efficient use of water. (2) If (1) applies, the farm records the volumes of irrigation water and the water used in the produce handling facility.		
17. Pro	eve	ntion of cross-c	contamination of sites and facilities		
17.1	Minor	Measures against pests	(1) The farm prevents the entry or proliferation of pests (small animals, insects, and birds) into the produce handling facility.(2) If the farm is controlling a pest, the control method does not affect food safety.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
17.2	_	Smoking and eating places	The smoking and eating places do not affect agricultural produce.		
17.3	\sim	Changing room and place to keep personal belongings	The produce handling facility has a changing room and a place for the workers to keep their personal belongings.		
17.4	_	Storage of fruits and vegetables	A risk assessment for contamination is implemented at least once a year, and procedures are determined, documented and implemented to reduce the risk of physical, chemical and biological product contamination including the following points. Agricultural products are maintained and stored in designated areas, handled in an appropriate condition. The results of risk assessment are recorded. (1) The storage place for fruits and vegetables is kept at the optimal temperature and humidity. (2) Dews condensed on the ceilings and the walls do not touch the stored produce. (3) When the produce is sensitive to the light (e.g., potatoes) and is stored for a long period, it is placed in a storage place where light does not enter.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
17.5	Major	Prevention of cross-contamination at sites and storages	(1) The farm implements a risk assessment of contamination and cross-contamination regarding the following items in the sites and storage places at least once a year, documents a procedure to reduce the risk of physical, chemical or biological contamination of produce, and implements necessary countermeasures. The results of risk assessment are recorded. The countermeasures can be cited from those for the other control points. 1) Propagation materials, crops, and agricultural produce (including given specific crop) 2) Packaging materials 3) Machinery, infrastructure, transportation vehicles, containers, and equipment for harvesting and produce handling (2) The results of the risk assessments and the countermeasures are recorded.		
17.6	Major	contamination	 (1) The farm implements risk assessments of contamination and cross-contamination and mixing of foreign matters, regarding the following items of the produce handling facility at least once a year. Procedures to reduce the risk of physical, chemical or biological contamination of produce, are documented, and the necessary countermeasures are implemented. The results of risk assessment are recorded. The countermeasures include the review of location and facility designs and can be cited from those for the other control points. 1) Agricultural produce (including given specific crop) 2) Packaging materials 3) Machinery, infrastructure, transportation vehicles, containers, and equipment for harvesting and produce handling (2) The results of the risk assessments and the countermeasures are recorded. 		
17.7	Major	Layout of the produce handling facility	There is a layout of the produce handling facility.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
17.8	_	Location, design and construction layout of the facilities	The facilities are located, designed, and laid out for construction considering the following. (1) Good Hygiene Practices (2) Prevention of contamination of the agricultural products (3) Prevention of parasitism by pests such as insects, rodents, and birds		
17.9	ω,	Allergen management	An allergen management plan is developed at all agricultural produce handling facilities. This includes risk assessments of cross-contacts with allergens and the procedures and the management methods to reduce or eliminate the cross-contact.		
17.10	Major	Suitability assessment of new sites	The suitability of new sites is assessed based on the analysis of the following items. The result of the analysis is recorded. (1) Safety of agricultural produce (ref. Control Points 15.1, 16.1.1, and 24.5.1) (2) Worker safety (ref. Control Point 14.1) (3) Impacts on the surrounding environment (ref. Control Point 21.1) (4) Development regulations of the natural protected areas		
17.11	Minor	Countermeasures for the problems of new sites	Based on the analysis conducted under Control Point 17.10, if the farm has conducted any countermeasure, the actions, and their results are recorded.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
18. Ma equipi		hinery, equipment, vehicles, harvesting containers and tools, packaging	mater	ials, cleaning	
18.1	Minor	Checking, maintenance, cleaning, and storage of machinery, equipment, and vehicles	 (1) There is a list of machinery, equipment, and vehicles on the farm. The list indicates the type of fuel or energy necessary to run the machinery, equipment, and vehicles. (2) The machinery, equipment, and vehicles are checked, maintained, cleaned, washed, and disinfected as necessary according to the documented procedure, and the maintenance activities are recorded. If the maintenance activities are outsourced, the maintenance slips are kept. (3) The machinery, equipment, and vehicles are stored so that they do not affect food safety or worker safety, and so that robbery is prevented. 		
18.1.1	Minor	Hygiene management of containers and vehicles	All containers and vehicles, including subcontracted vehicles, used for transporting harvests (including packaging materials) and shipments are suitable for the purpose of transporting agricultural products and are kept clean to prevent cross-contamination.		
18.2	_	Management of testing, measuring, and sorting equipment	There is a list of testing, measuring, and sorting equipment and their standard test pieces. This equipment is regularly checked to ensure that it can test, measure, or sort accurately. The check results are recorded. The devices that require calibration and can affect food safety risks are calibrated. The calibration of these measuring and monitoring devices is traceable to a recognised standard or method.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
18.3		and packaging	Procedures to reduce the physical, chemical or biological contamination risk of the produce, including the following points, are documented. (1) The farm regularly checks that the harvesting containers, tools, packaging materials, and produce storage containers that are used in the harvesting process and the produce handling process are not deteriorated, damaged, or contaminated. (2) If any problem is found as a result of the checks, the item is repaired, cleaned, or replaced. (3) If multiple packaging materials are used, there is a countermeasure to prevent the wrong material from being used or the wrong description being used by mistake.		
18.4	Minor	Management of cleaning tools, cleaning agents, and disinfectants	Procedures to reduce the contamination risk of the produce, including the following points, are documented. (1) The cleaning tools used to clean the machinery, equipment, harvesting containers, tools, and produce storage containers that are used in the harvesting process and in the produce handling process are separated from the other cleaning tools. (2) The cleaning tools are regularly checked and replaced as necessary, in order to prevent a deteriorated cleaning tool from contaminating agricultural produce. (3) The cleaning tools are kept in a designated place after use in a hygienic manner. (4) The cleaning agents and disinfectants do not pose any risk to food safety and are stored safely in a designated place.		
18.5	Minor	Use of machine oil	There is a measure to ensure that the machine oil applied to parts of the machinery that may come into contact with agricultural produce in the harvesting process and in the produce handling process will not affect food safety.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
18.6	Minor	Safe use of machinery and equipment	(1) The use of machinery and equipment follows the manuals or the instructions of the manufacturer.(2) The machinery or equipment is not modified in a way that risks its safety.(3) The safety of machinery and equipment is confirmed before purchase.		
18.7	Minor	Safety of the surface that comes into contact with agricultural products	The machinery, equipment, vehicles, packaging materials, harvesting containers, tools, and produce storage containers that come into contact with agricultural produce meet the following conditions. (1) The safety of the material of the surface that come into contact with agricultural produce is verified. If any problem with the material is identified, it must not be used. (2) The contact surface must not damage the surface of agricultural produce (except for cases in which it is intended to cut agricultural produce). (3) The contact surface can be easily cleaned, disinfected and maintained.		
19. Eı	ner	gy management	and preventing global warming		
19.1	Major	Storage of fuels	 (1) No fire is allowed near or at the fuel storage. (2) There is a danger sign near the fuel storage. (3) Gasoline is stored in a metal container, which prevents fire caused by static electricity. (4) There is a fire extinguisher or firefighting equipment at the fuel storage. (5) There is no spillage of fuel. There is a measure to deal with fuel spillage. 		
19.2		Reduction of greenhouse gas emission and efficient use of energy	The farm is aware of its consumption of energy, such as electricity, gas, heavy oil, gasoline, diesel oil, and kerosene. The farm tries to use energy efficiently to reduce the emission of greenhouse gases.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
20. W	ast	e management	and effective use of resources		
20.1	Major	Storage and disposal of wastes	(1) The farm is aware of the wastes from the field and the produce handling facility. The storage and disposal methods of the wastes are documented. The wastes are stored and disposed such that they do not contaminate agricultural produce, materials, or the environment.(2) The documented methods in (1) are followed.		
20.2	Minor	Efficient use of resources	The farm is working on the following activities regarding the wastes from the farm. (1) Reduction of wastes (2) Segregation of wastes and their storage at designated places (3) Recycling of wastes		
20.3	Major	Organizing and cleaning	The sites, storage, and produce handling facility are kept organized and cleaned, and there is no scattered waste.		
21. Pr	ote	ection of surrou	nding environment and harmonizing with local communities		
21.1	_	Protection of surrounding areas	(1) The farm ensures that the noise, vibration, bad smell, insects, smoke, dusts, or harmful substances coming from the field or from the produce handling facility are not affecting the people living in the surrounding areas of the farm.(2) When agricultural machinery needs to come out to the public road, the farm ensures that the machinery does not cause trouble for pedestrians and other vehicles on the road.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
21.2	Minor	Recycling of resources within the community	(1) When organic matters are incorporated into the soil, the farm gives priority to using organic matters generated within the local community.(2) When the crop residue from the field or the produce handling facility is used for compost or animal feed, the local community is given priority.		
21.3	Recom.	Relationship with the local community	(1) The farm is aware and respectful of the common rules and traditional practices of the local community.(2) The farm actively participates in community events and works toward smooth communications within the local community.		
22. Bi	odi	versity conserv	ration		
22.1	Recom.	Awareness of biodiversity	 (1) The farm is aware of the flora and fauna in the farm and around the farm. The farm is aware of any rare species. (2) The farm is aware of the species that existed in the past and have been reduced. (3) There is a list of (1) and (2), and the farm confirms their population increase and decrease at least once a year, and records the result. 		
22.1.1	Minor	Management of exotic species	(1) The farm manages the exotic species used in the farm production such that they do not disturb the existing ecosystems.(2) When there is a governmental instruction regarding the management of exotic species, the farm follows the instruction.		
22.2	Recom.	environmental conservation and	The farm is aware of both the impacts of agriculture on the environment and the impacts of the environment on agriculture. Based on this awareness, the farm establishes its principles and contributes to the environment and the biodiversity as a member of the local community.		

No.	Level	Control Point	Compliance Criteria	Result	Comment					
C. Cu	C. Cultivation process management									
23. M	ana	ngement of prop	pagation materials							
23.1	Major	Procurement of propagation materials (seeds and nursery)	 (1) When the farm purchases a propagation material, the farm keeps its certificate or keeps records that contain its variety name, place of origin, seller, agrochemicals applied (including seed treatment and any agrochemical used during the nursery period), and the number of applications. (2) When the farm reproduces its own propagation material, there is a record of the site where the seed/plant has been harvested. (3) When the propagation material is a quarantine target of the government, the farm confirms that the material has passed governmental inspection. 							
23.2	_	Sowing/planting record	The following is recorded for sowing/planting. (1) Lot number of the propagation material (2) Method of sowing/planting (including the identification of machinery) (3) Date of sowing/planting (4) Site name or number							

No.	Level	Control Point	Compliance Criteria	Result	Comment
23.3	Major	Cultivation, storage, and sales of a genetically modified crop	The genetically modified crop meets the following conditions. (1) It is cultivated following the governmental instruction of the country or region of production. (2) It is a variety that is permitted for cultivation in the country of production. (3) The cultivation records show that it is a genetically modified crops. (4) The sites for the genetically modified crop and the sites for non-genetically modified crop are clearly distinguished. (5) The propagation materials and harvested produce of the genetically modified crop are separated from those of non-genetically modified crop. (6) It is sold following the governmental instruction of the country of sale. (7) It is a variety that is permitted for sale in the country of sale. (8) It is sold following the governmental instruction regarding product display in the country of sale. When there is no legislation, the product display at least contains the produce name, place of origin, and "genetically modified produce" or "genetically modified produce, unfractionated."		
24. Aç	gro	chemical mana	gement		
24.1 A	gro	chemical appli	cation plan		
24.1.1	Major	Implementation of IPM	(1) The person responsible for agrochemical management develops an IPM (Integrated Pest Management) plan to control damage by pests, diseases and weeds by combining cultural methods, biological methods, physical methods, and chemical methods. (2) The responsible person analyzes the past occurrences of pests, diseases, and weeds, and the effectiveness of agrochemical applications of the past to improve the agrochemical application plan.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
24.1.2	Major	Selection and planning of agrochemicals	The person responsible for agrochemical management develops an agrochemical application plan that meets the following points. (1) The plan contains product names, active ingredients, target crops, target pests/diseases/weeds, dilution rate, application dosage, number of applications, total number of applications, application timing, and application methods. (2) The plan complies with the regulations on agrochemical applications of the producer country. (3) If there is any requirement from a client or the local community, the plan meets the requirements. (4) If the farm intends to export the agricultural produce, the plan does not contain the agrochemicals that are prohibited in the importing country. The farm confirms the maximum residue limits of the allowed agrochemicals before selecting them for application. (5) The plan considers toxicity of agrochemicals to fish if an agrochemical is to be applied in a rice paddy or at a site near an aquatic ecosystem. (6) The plan includes post-harvest agrochemicals.		
24.1.3	\circ	Prevention of development of resistance	The plan takes into consideration the agrochemicals used in the past, to avoid development of resistance. If there is an instruction on a product label, the instruction is followed.		
24.1.4	α,	Measures against agrochemical residue for the second crop	The farm confirms whether the agrochemicals used for the current crop are applicable for the second crop and takes countermeasures to avoid exceeding the maximum residue limits of the second crop.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
24.2 P	rep	aration of agro	chemicals		
24.2.1	Major	Decisions on agrochemical application	 (1) The person responsible for agrochemical management decides on agrochemical applications based on the plan developed in Control Point 24.1.2. (2) When the plan needs to be changed, the changes need to meet the conditions of Control Point 24.1.2. (3) Application dates are calculated based on the planned harvesting date. (4) The farm abides by labeled instructions. 		
24.2.2	Major	Preparation and confirmation of agrochemicals	(1) The operators do not prepare or apply agrochemicals without the permission and instruction of the responsible personnel.(2) Expired agrochemicals are not used.		
24.2.3	Major	Preparation of the spray solution	 (1) Spray solution is prepared at a place that would not affect agricultural produce or the environment. (2) Agrochemicals are measured accurately. (3) There are designated tools to clean spilled agrochemicals. (4) Measurement and mixing follow the labeled instructions and are conducted wearing protective clothing and equipment. (5) A water supply hose is not directly put into the tank to mix the spray solution. 		

No.	Level	Control Point	Compliance Criteria	Result	Comment
24.2.4	Major	Measurement and dilution of agrochemicals	 (1) Necessary dosages are calculated precisely, and there is no leftover solution after applications. (2) Agrochemicals are diluted precisely. (3) When agrochemicals are mixed, the mixing follows the labeled instructions and the order of mixing, and the agrochemicals are mixed well and in the appropriate order. (4) A measuring cup and empty agrochemical containers are rinsed at least three times with water, and the rinsate is poured back into the application tank as a part of the water used for dilution. 		
24.3 A	gro	chemical applic	cation and records		
24.3.1	Major	Wearing protective clothing and equipment	(1) The operators wear necessary protective clothing and equipment, according to the label instructions, during agrochemical applications.(2) If there is a limited duration or time of use for a mask, the mask is replaced accordingly.		
24.3.2	Major		 (1) After agrochemical application, there is no cross-contamination through used protective clothing and equipment. (2) Reusable protective clothing and equipment are washed after use. (3) Protective clothing is washed separately from other clothing, and gloves are washed before taking them off. (4) Boots are thoroughly washed including their shoe soles. (5) Protective clothing that has been torn or damaged and dirty mask filters are replaced. 		
24.3.3	Minor	Storage of protective clothing and equipment	After cleaning, protective clothing and equipment is dried well and stored such that they do not come into contact with agricultural produce. They are stored after drying.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
24.3.4	Minor	Disposal of leftover solution	(1) All the solution that has been prepared is used thoroughly at the site.(2) The disposal of leftover solutions follows the government instructions. If there is no government instruction, they are disposed at a designated place within the farm such that they do not affect agricultural produce or water sources.		
24.3.5		Washing of application equipment and disposal of rinsate	 (1) After an application, the application machinery, hose, nozzle, joints, and tank are washed immediately such that there is no agrochemical residue on the equipment. (2) Washing of application equipment is conducted at a designated place within the farm such that it does not affect agricultural produce or water sources. (3) Rinsate is disposed in the same manner as (2) of Control Point 24.3.4. 		
24.3.6	Minor	Management of re-entry	(1) If there is a labeled instruction regarding re-entry to the site that has been recently sprayed or to its surrounding areas, the instruction must be followed. The restriction on re-entry is communicated.(2) Even if there is no labeled instruction, nobody enters the site that has been recently sprayed until it is dry.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
24.3.7	Major	applications	The following information is recorded on agrochemical applications. (1) Target crop (applicable crop according to the agrochemical registration) (2) Location of the application (site name, etc.) (3) Application date (4) Product name (5) Target pests/diseases/weeds (6) Active ingredient (7) Dilution rate and the quantity of the solution (when the dilution rate is defined)/applied quantity per 1,000m² (when the application quantity is defined) (8) Application timing (pre-harvest interval, etc.) (9) Application method (identification of the application machinery) (10) Operator name		
24.3.7.1	Major	Verification of proper use of agrochemicals	 (1) Before harvesting, the person responsible for agrochemical management verifies proper use of agrochemicals using the records of agrochemical application according to Control Point 24.2.1(1) and (2), and the verification is recorded. (2) The person responsible for agrochemical management verifies the application timing (pre-harvest interval, etc.) after harvest and before shipment to ensure that Control Point 24.2.1(3) has been properly followed. 		

No.	Level	Control Point	Compliance Criteria	Result	Comment
24.4 S	tor				
24.4.1	Major	Management of agrochemical storage	 (1) No agrochemical is left outside the storage. (2) The person responsible for agrochemical management manages the storage key and avoids misuse or robbery. (3) The agrochemical storage is made of a robust material and kept locked. Nobody can access the agrochemicals without the permission and instruction of the person responsible for agrochemical management. (4) Poisonous, deleterious, and dangerous substances are displayed with a warning and are stored separately from other agrochemicals. (5) For a walk-in type storage, there is good ventilation. (6) There is enough light to be able to read labels. (7) If a label contains an instruction regarding storage temperature, the instruction is followed. 		
24.4.2	\subseteq	Prevention of misuse	 (1) Agrochemicals are stored in the same containers as when they are purchased. (2) Agrochemicals are stored in a way that prevents misuse. (3) Prohibited agrochemicals, expired agrochemicals, or agrochemicals that have lost registration status are stored separately to avoid misuse. 		
24.4.3	Minor	Prevention of contamination by agrochemicals	 (1) Containers of agrochemicals in use are well sealed. (2) There is a countermeasure to prevent agrochemical containers from falling. (3) There is a countermeasure to prevent agrochemicals from spilling. (4) The shelves of the agrochemical storage do not absorb agrochemicals. (5) There are designated tools to clean spilled agrochemicals. (6) There is a countermeasure to prevent agrochemicals from coming into contact with agricultural produce or other materials. 		

No.	Level	Control Point	Compliance Criteria	Result	Comment
24.4.4	Major	Storage of dangerous substances	When an ignitable or flammable pesticide (such as oil solution or emulsion) is stored, the farm confirms the manner of storage with the supplier or the manufacturer, and follows their instruction. The pesticide is displayed with a warning sign.		
24.4.5	_	Inventory of agrochemicals	There is an inventory that records the quantity of agrochemicals increasing and decreasing in the storage, and the quantity of agrochemicals currently in the storage is clear.		
24.5 A	gro	chemical drift			
24.5.1	Major	Prevention of negative impacts of agrochemical drift	 (1) The farm is aware of the crops cultivated in its own sites and in its surrounding farms, and is aware of the risks of agrochemical drift from these areas. The farm is also aware of the risk of agrochemicals entering the farm through irrigation water. (2) The farm communicates with the producers of the surrounding farms to avoid negative impacts of agrochemical drift from the surrounding areas. 		
24.5.2	_	Prevention of agrichemical drift to surrounding farms	The farm takes countermeasures to avoid causing drift to its surrounding farms. The farm prevents agrochemicals from flowing out of the farm through ground water, streams, or rivers. When the farm uses soil fumigants, it follows the label instruction and covers the soil after application.		

No.	Level	Control Point	Compliance Criteria	Result	Comment			
24.6 A	24.6 Agrochemical residue analysis							
24.6.1	Major	Sampling plan for agrochemical residue analysis	 (1) There is a documented plan on agrochemical residue analysis. (2) The sample for analysis is selected from the product considering the item, active ingredient, harvesting period, or location that has the highest risks of chemical residue among the agrochemicals that have been used in the farm or that could have drifted from surrounding areas. (3) When an active ingredient with a higher risk cannot be identified, a general analysis of all active ingredients is conducted. 					
24.6.2	Major	Implementation of agrochemical residue analysis	(1) The farm conducts agrochemical residue analysis at least once a year, according to Control Point 24.6.1, to verify that the agrochemicals are used correctly. If a maximum residue limit is exceeded, it is recorded according to the procedure of Control Point 9.1.1. (2) The result of maximum residue analysis is retained.					
25. Fe	ertil	izer manageme	nt					
25.1 S	ele	ction and plann	ing of fertilizers					
25.1.1		Understanding the nutrient composition of fertilizers	(1) The farm keeps the information on nutrient composition of purchased fertilizers.(2) When a fertilizer is made on the farm or does not come with information on nutrient composition, the farm sends it for analysis or investigates the literature to understand its average nutrient composition.					

No.	Level	Control Point	Compliance Criteria	Result	Comment
25.1.2	/lajo		 (1) The person responsible for fertilizer management develops a fertilizer application plan. (2) The fertilizer application plan contains the names and nutrient composition of the fertilizers, quantity per 1,000m², application method, and application period/timing. The application period/timing takes into consideration the food safety issues. (3) The fertilizer application takes into consideration the following information to improve the produce quality while protecting the environment. 1) Correlation between the productivity and produce quality in the past and the fertilizer applications 2) Result of the soil analysis 3) Recommendations by the government or agricultural cooperatives on fertilizer application 4) Need for soil conservation (ref. Control Point 15.3) 5) Cases of water contamination of the area due to fertilizer application 6) Greenhouse gas emission by fertilizers (e.g., nitrous oxide) 		

No.	Level	Control Point	Compliance Criteria	Result	Comment
25.1.3	Major	Safety of fertilizers	 (1) The farm confirms that the radioactive substances contained in fertilizers do not exceed the government standard. (2) For the fertilizers that have not passed the official standard of the government, the farm investigates their ingredients (including the place of origin), manufacturing process, and analysis result, to verify that these fertilizers do not pose food safety risks to agricultural produce. (3) For compost, Bio Solids, and natural fertilizers, the farm takes management measures against pathogenic microorganisms, killing weed seeds, etc. (e.g., composting, pasteurization, heat drying, UV irradiation, alkali digestion, natural drying, leaving enough time between application of agricultural inputs and harvesting of crops, and the combination of all these techniques). (4) Agricultural produce is protected from contamination through workers, equipment, and facilities that come into contact with compost, Bio Solids, or natural fertilizers. (5) The farm does not put anything that may contaminate other sources of water or soil into the field. (6) As for excreta and graywater, the farm takes into consideration the WHO guidelines for the safe use of wastewater, excreta, and graywater. The farm does not use untreated Bio Solids. 		
25.2 F	erti	lizer application	n and records		
25.2.1		Fertilizer application records	The following information is recorded for fertilizer applications. (1) Location (site name, etc.) (2) Date (3) Fertilizer name (4) Quantity (5) Application method (including identification of application machinery) (6) Operator name		

No.	Level	Control Point	Compliance Criteria	Result	Comment
25.3 S	tora				
25.3.1	Major	Storage of dangerous substances (fertilizers)	When fertilizers that can heat up, ignite, or explode (e.g., ammonium nitrate, potassium nitrate, calcium nitrate, sulfur powder, or quicklime) are stored, the farm confirms their storage method with the supplier or manufacturer and follows the instructions.		
25.3.2	_	Storage condition of fertilizers	Fertilizers in bags are stored under the following conditions. (1) The fertilizers are covered and are not affected by sunlight, frost, rain or water flowing from outside. (2) The storage is kept clean, and there is no spilled fertilizer or waste. (3) The fertilizers are not placed directly on the ground. (4) The fertilizers that contain agrochemicals and lime nitrogen are stored separately from the other fertilizers.		
25.3.3	Recom.	Storage of compost	The floor of the storage for compost is made of impervious material (e.g., concrete). The storage for compost is covered or has walls so that it is protected from wind and rain, and that the liquid from the compost will not contaminate water sources. Raw animal manure or compost in a decomposition process does not come into contact with completed compost.		
25.3.4	Minor	fertilizers	There is an inventory that records the quantity of fertilizers increasing and decreasing in the storage, and the quantity of fertilizers that are currently in the storage is clear. For fertilizers that are difficult to measure, there is an alternative method to confirm their stock.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
D. Co	ntr	ol points for sp	routs only	•	
15.1.1	Jino	Safety of the substrate for sprouts	(1) The farm conducts a risk assessment on the safety of the substrate for sprouts at least once a year.(2) If any risk is detected as a result of the risk assessment, the farm takes countermeasures against the risk.		
15.1.2	Minor	Hygiene management of the substrate for sprouts	The substrate and cultivation containers for sprouts meet the following conditions. (1) They are stored in a way that prevents contamination by pathogenic microorganisms and foreign matter. (2) When they are reused, they are properly washed before reuse. (3) Containers that have been washed can be distinguished from those that have not been washed.		
16.1.1.1	/ajo	Safety of the water used for sprouts	The farm conducts the following measures for the water used for sprouts. (1) The farm conducts an analysis of the water used in the farm at least once a year. The result of the analysis, which shows the absence of E. coli, is kept as a record. Unless the water used is tap water, the chlorine concentration is kept above 0.1mg/\(\ell\). (2) The farm regularly checks and maintains the water supply facility, and confirms its functionality. (3) The farm prevents the contamination of the nutrient solution tank by pathogenic microorganisms and foreign matter. (4) The farm prevents microbial contamination of the water in the cultivation pool.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
17.5.1	m .	Sprout handling area	The sprout handling area (including the handling of seeds and crops) is distinguished from the other areas and meets the following conditions. (1) It is regularly checked, and any broken or dysfunctional part is repaired. (2) There is no stagnant water on the floor. (3) There is no accumulated waste or stagnant wastewater at the drains or drainage ports.		
17.6.2	Major	Hygiene management of sprouts	The produce handling process of the sprouts complies with the following. (1) Stool analysis (including Salmonella and enterohemorrhagic E. coli) is conducted for workers at least once a year. (2) There is a disinfection tank at the entrance of the produce handling facility, and the antiseptic solution in the tank is kept at an effective concentration. (3) Microbial analysis of the produce is conducted at least once a month. If E. coli is detected, the analysis of E. coli needs to be conducted at least once a week, and Salmonella group bacteria and enterohemorrhagic E. coli also need to be included in the analysis. The farm must revise and improve its hygiene procedures, and weekly analysis must be continued until the absence of above-mentiond bacteria is confirmed on a consistent basis and the improved hygiene procedures are properly implemented. (4) The workers can change shoes and wash hands at the doorway of the toilets. There is a countermeasure to prevent contamination from the opening for collecting night soil.		
18.8	\subseteq	Production facility for sprouts	The production facility for sprouts is made exclusively for each process, and is not used for other processes.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
23.1.1	~	Safety of the seeds of sprouts	The seeds of sprouts meet the following conditions. (1) They are disinfected before germination, and the disinfection treatment is recorded. (2) They are managed in a hygienic manner after disinfection. (3) When receiving seeds, the farm verifies that there is no abnormality, such as a broken bag or leakage of water. (4) The farm confirms that there is no foreign matter, such as animal droppings, carcasses, and flies, mixed with the seeds.		
23.1.2	Minor	Storage of the seeds of sprouts	The seeds of sprouts are handled under the following conditions. (1) There is a countermeasure to prevent contamination of the seeds by pathogenic microorganisms or foreign matters. (2) The storage room for seeds is kept at the optimal temperature for the variety. (3) When sowing the seeds, the equipment and hands are kept clean.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
E. Co	ntro				
15.1.3	σ×.	Safety of the materials for mushroom cultivation	The farm conducts a risk assessment on the safety of the following materials used for mushroom cultivation and records the result of the analysis. Raw woods and substrate comply with the standard on radioactive substances. If any risk is detected as the result of the risk assessment, the farm takes countermeasures against the risk. (1) The farm confirms the place of origin and tree species of the raw wood used (including substrates such as sawdust and wood chips). (2) The farm confirms the supplier and ingredients of the nutrients (such as rice bran and wheat bran). (3) The farm confirms the supplier and ingredients of the additives (such as calcium carbonate). (4) The farm confirms the supplier and ingredients of the yield boosters. (5) The farm confirms the supplier and materials of the containers. (6) The farm confirms the supplier and materials of the other materials used (such as sealing wax, styrene stopper, and soil cover).		
15.1.4	nor	Hygiene management of the substrate and containers used for growing mushrooms	The substrate and containers used for growing mushrooms meet the following conditions. (1) They are stored in a way that prevents contamination by pathogenic microorganisms and foreign matter. (2) When they are reused, they are washed and disinfected appropriately. When they are disinfected, there is a record of the location, date, name of disinfectant, disinfection method, operator name, and pre-planting interval. When disinfection is conducted outside the farm, there is a record of the name and address of the company that disinfected the substrate. (3) The farm handles the substrate and containers in a hygienic way. (4) The farm regularly cleans the facility. (5) The soaking containers are not used for other purposes, such as preparation of agrochemicals. (6) The disinfectant used does not negatively affect mushroom cultivation.		

No.	Level	Control Point	Compliance Criteria	Result	Comment
15.1.5	Minor	Records on the application of inputs on mushrooms	The farm records the following information regarding the inputs applied to mushrooms. (1) Location (e.g. site name) (2) Date (3) Name of the input used and its active ingredient (e.g. calcium carbonate, ammonium sulfate, etc.) (4) Quantity (5) Application method (6) Operator name (7) Supplier		
16.1.1.2	Minor	Safety of the water used for mushrooms	The farm confirms that the heavy metal content (such as lead, cadmium, mercury, and arsenic) of the water used for mushrooms does not exceed the level of that of the potable water standard.		
17.6.3	Minor	Hygiene management of the mushroom cultivation facility	The facility for mushroom cultivation complies with the following conditions. (1) The disinfectants used for the facility and inoculation equipment do not touch the substrate. (2) The disinfectants used for the cultivation location do not touch the mushroom beds. (3) The disinfectants used do not negatively affect mushroom cultivation. (4) The facility is maintained at the optimal temperature and humidity for the work environment.		
23.1.3	Minor	Handling of the inoculum of mushrooms	The inoculum of mushrooms complies with the following conditions. (1) There is a countermeasure to prevent contamination of the inoculum by pathogenic microorganisms or foreign matter. (2) The storage room for the inoculum is kept at the optimal temperature for the variety. (3) The inoculation equipment and hands that touch the inoculum are kept clean.		

JGAP Japan GAP Foundation

Nihon nougyo kenkyujo Bldg. 4F, 3-29 Kioi-cho Chiyoda-ku, Tokyo, 102-0094, Japan Tel: (81) 3 5215 1112, Fax (81) 3 5215 1113

URL: http://jgap.jp E-mail: info@jgap.jp