GLOBALG.A.P.
(EUREPGAP)

Control Points and Compliance Criteria
Integrated Farm Assurance

FRUIT AND VEGETABLES

English Version
V3.0-2 Sep07

Valid from 30 September 2007

GG_EG_IFA_CPCC_FV_ENG_V3_0_2_Sep07.xls

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CONTENTS

N°	Control Point	Compliance Criteria	Level
FV .	**FRUIT AND VEGETABLES**		
FV . 1	**PROPAGATION MATERIAL**		
FV . 1 . 1	**Choice of variety or Rootstock**		
FV . 1 . 1 . 1	Is the producer aware of the importance of effective crop husbandry in relation to the "mother crops" (i.e. the seed producing crop) of the registered product crop?	Cropping techniques and measures are adopted in the "mother crops" which can minimise inputs such as plant protection products and fertilizers in the registered product crops.	Recom.
FV . 2	**SOIL AND SUBSTRATE MANAGEMENT**		
FV . 2 . 1	**Soil Fumigation (N/A if no soil fumigation)**		
FV . 2 . 1 . 1	Is there a written justification for the use of soil fumigants?	There is written evidence and justification for the use of soil fumigants including location, date, active ingredient, doses, method of application and operator. The use of Methyl Bromide as soil fumigant is not permitted.	Minor Must
FV . 2 . 1 . 2	Is any pre-planting interval complied with?	Pre-planting interval must be recorded.	Minor Must
FV . 2 . 2	**Substrates** (N/A if no substrates are used)		
FV . 2 . 2 . 1	Does the producer participate in substrate recycling programmes for substrates where available?	The producer keeps records with quantities recycled and dates. Invoices/loading dockets are acceptable. If there is no participation in a recycling program available, it should be justified.	Recom.
FV . 2 . 2 . 2	If chemicals are used to sterilise substrates for reuse, have the location, the date of sterilisation, type of chemical, method of sterilisation, name of the operator and pre-planting interval been recorded?	When the substrates are sterilised on the farm, the name or reference of the field, orchard or greenhouse are recorded. If sterilised off farm then the name and location of the company which sterilises the substrate are recorded.The following are all correctly recorded: the dates of sterilisation (day/month/year); the name and active ingredient; the machinery (e.g. 1000 l-tank etc); the method (e.g. drenching, fogging); the operator's name (the person who actually applied the chemicals and did the sterilisation); and the pre-planting interval.	Major Must
FV . 2 . 2 . 3	For substrate of natural origin, can it be demonstrated that it does not come from designated conservation areas?	There are records that prove the origin of the substrates of natural origin being used. These records demonstrate that the substrates do not come from designated conservation areas.	Recom.

N°	Control Point	Compliance Criteria	Level
FV . 3	**IRRIGATION/FERTIGATION**		
FV . 3 . 1	**Quality of Irrigation Water**		
FV . 3 . 1 . 1	According to the risk analysis (CB.6.3.2), does the analysis consider the microbial contaminants ?	According to the risk analysis (if there is a risk of microbial contaminants), there is a documented record of the relevant microbial contaminants through a laboratory analysis.	Minor Must
FV . 3 . 1 . 2	If the risk analysis so requires, have adverse results been acted upon?	Records are available of corrective actions or decisions taken.	Minor must
FV . 4	**HARVESTING**		
FV 4 . 1	**General**		
FV . 4 . 1 . 1	Has a hygiene risk analysis been performed for the harvest and pre-farm gate transport process?	There is a documented and up to date (reviewed annually) risk analysis covering physical, chemical and microbiological contaminants and human transmissable diseases, customised to the products. It must also include FV.4.1.2 to FV.4.1.9. The risk analysis shall be tailored to the scale of the farm, the crop, and the technical level of the business. No N/A.	Major Must
FV . 4 . 1 . 2	Are documented hygiene procedures for the harvesting process implemented ?	The farm manager or other nominated person is responsible for implementation of the hygiene procedures. No N/A.	Major Must
FV . 4 . 1 . 3	Have workers received basic instructions in hygiene before handling produce?	There must be evidence that the workers received training regarding personal cleanliness and clothing, e.g. hand washing, wearing of jewellery, fingernail length or cleaning, etc.; personal behaviour, e.g. no smoking, spitting, etc (reference AF.3.1.1).	Major Must
FV . 4 . 1 . 4	Are hygiene instructions and procedures for handling produce to avoid contamination of the product implemented?	There is evidence that the workers are complying with the hygiene instructions and procedures. Packers must be trained, using written (in appropriate languages) and/or pictorial instructions, to prevent physical (such as snails, stones, insects, knives, fruit residues, watches, mobile phones etc.), microbiological and chemical contamination of the product during packing.	Major Must

N°	Control Point	Compliance Criteria	Level
FV . 4 . 1 . 5	Are the containers and tools used for harvesting cleaned, maintained and protected from contamination?	Reusable harvesting containers, harvesting tools (i.e., scissors, knifes, pruning shears, etc.) and harvesting equipment (machinery) are cleaned and maintained, and a cleaning and disinfection schedule is in place (at least once a year) to prevent produce contamination?	Major Must
FV . 4 . 1 . 6	Are vehicles used for transport of harvested produce cleaned and maintained?	Farm vehicles used for transport of harvested produce that are also used for any purpose other than transport of harvested produce, are cleaned and maintained, and a cleaning schedule to prevent produce contamination is in place (i.e. soil, dirt, organic fertilizer, spills, etc.).	Major Must
FV . 4 . 1 . 7	Do harvest workers that come into direct contact with the crops have access to clean hand washing equipment?	Fixed or mobile hand washing equipment to clean and disinfect hands is accessible to harvest workers. No N/A.	Major Must
FV . 4 . 1 . 8	Do harvest workers have access to clean toilets in the vicinity of their work?	Fixed or mobile toilets (including pit latrines) constructed of materials that are easy to clean and with catch basins designed to prevent contamination in the field are accessible to harvest workers within 500m and they are in a good state of hygiene. Where an employee is working independently, the 500m distance can be modified to allow the presence of toilets at an increased distance, providing that there is reasonable and adequate transport available to the worker.	Minor Must
FV . 4 . 1 . 9	Are produce containers used exclusively for produce?	Produce containers are only used to contain harvested product (i.e. no agricultural chemicals, lubricants, oil, cleaning chemicals, plant or other debris, lunch bags, tools, etc.). If multi-purpose trailers, carts, etc. are used as produce containers, they must be cleaned prior to use.	Major Must
FV . 4 . 2	**Final Produce Packing at point of harvest** (Applicable when during harvest, final packing and last human contact with product takes place in-field)		
FV . 4 . 2 . 1	Does the harvesting process hygiene procedure consider handling of harvested produce and produce packed and handled directly in the field, orchard or greenhouse?	All produce packed and handled directly in the field, orchard or greenhouse must be removed from the field overnight, in accordance with the harvest hygiene risk assessment results. All field packed produce must be covered to prevent contamination once packed.	Major Must
FV . 4 . 2 . 2	Is a documented inspection process in place to ensure compliance with defined quality criteria?	An inspection process is in place to ensure products are packed according to documented quality criteria.	Minor Must
FV . 4 . 2 . 3	Are packed produce protected from contamination?	All field packed produce must be protected from contamination.	Major Must

N°	Control Point	Compliance Criteria	Level
FV . 4 . 2 . 4	Is any collection/ storage /distribution point of field packed produce maintained in clean and hygienic conditions?	If packed produce is stored on farm, storage areas must be cleaned.	Major Must
FV . 4 . 2 . 5	Is packing material used for in-field packing, stored to protect against contamination?	Packing material must be stored to protect it against contamination.	Major Must
FV . 4 . 2 . 6	Are bits of packaging material and other non-produce waste removed from the field?	Bits of packaging material and non-produce waste must be removed from the field.	Minor Must
FV . 4 . 2 . 7	If packed produce are stored on farm, are temperature and humidity controls (where applicable) maintained and documented?	Temperature and humidity controls (where applicable) must be maintained and documented, in accordance with the hygiene risk assessment results and quality requirements when packed produce are stored on farm.	Major Must
FV . 4 . 2 . 8	If ice or water is used in produce handling at point of harvest, is it made with potable water and handled under sanitary conditions to prevent produce contamination?	Any ice or water used at point of harvest should be made with potable water and handled under sanitary conditions to prevent produce contamination.	Minor Must
FV . 5	**PRODUCE HANDLING** (N/A if Produce Handling in a packing facility on farm is excluded from certification; see General Regulations Part I, 4.9.6.3)		
FV . 5 . 1	**Principles of Hygiene**		
FV . 5 . 1 . 1	Has a hygiene risk analysis and risk assessment been performed for the harvested crop handling process that covers the hygiene aspects of the produce handling operation?	There is a documented and up to date (reviewed annually) risk analysis of the possible risks, and an assessment of the likelihood and severity of the risks covering physical, chemical and microbiological contaminants and human transmissable diseases, customised to the products and operation of the packhouse.	Major Must
FV . 5 . 1 . 2	Are documented hygiene procedures implemented for the process of harvested crop handling?	The farm manager or other nominated person is responsible for implementation of the hygiene procedures as a direct result of the produce handling hygiene risk analysis.	Minor Must
FV . 5 . 2	**Personal Hygiene**		
FV . 5 . 2 . 1	Have workers received basic instructions in hygiene before handling produce?	There must be evidence that the workers received training regarding transmission of communicable diseases, personal cleanliness and clothing, i.e. hand washing, wearing of jewellery and fingernail length and cleaning, etc.; personal behaviour, i.e. no smoking, spitting, eating, chewing, perfumes, etc.	Major Must
FV . 5 . 2 . 2	Do the workers implement the hygiene instructions for handling produce?	There is evidence that the workers are complying with the hygiene instructions. Unless exclusion from Produce Handling declaration exists for each registered product, no N/A.	Minor Must

N°	Control Point	Compliance Criteria	Level
FV . 5 . 2 . 3	Are all workers wearing outer garments that are clean and fit for purpose for the operation and able to protect products from contamination?	All workers wear outer garments (e.g. smocks, aprons, sleeves, gloves) that are clean and fit for purpose for the operation according to the risk analysis. This will depend on the product and operation.	Recom.
FV . 5 . 2 . 4	Are smoking, eating, chewing and drinking confined to designated areas segregated from products?	Smoking, eating, chewing and drinking are confined to designated areas and are never allowed in the produce handling or storage areas. (Drinking water is the exception).	Minor Must
FV . 5 . 2 . 5	Are signs clearly displayed in the packing facilities with the main hygiene instructions for workers and visitors?	Signs with the main hygiene instructions must be visibly displayed in the packing facility.	Minor Must
FV . 5 . 3	**Sanitary Facilities**		
FV . 5 . 3 . 1	Do workers in the packing facility have access to clean toilets and hand washing facilities in the vicinity of their work?	Toilets in a good state of hygiene must not open directly onto the produce handling area, unless the door is self-closing. Hand washing facilities, containing non-perfumed soap, water to clean and disinfect hands, and hand dry facilities must be accessible and near to the toilets (as near as possible without the potential for cross-contamination).	Major Must
FV . 5 . 3 . 2	Are signs clearly displayed instructing workers to wash their hands before returning to work?	Signs must be visible with clear instructions that hands must be washed before handling products, especially after using toilets, eating, etc.	Major Must
FV . 5 . 3 . 3	Are there suitable changing facilities for the workers?	The changing facilities should be used to change clothing and protective outer garments as required.	Recom.
FV . 5 . 3 . 4	Are there lockable storage facilities for the workers?	Secure storage facilities should be provided at the changing facility to protect the workers' personal belongings.	Recom.
FV . 5 . 4	**Packing and Storage areas**		
FV . 5 . 4 . 1	Are produce handling and storage facilities and equipment cleaned and maintained so as to prevent contamination?	To prevent contamination, produce handling and storage facilities and equipment (i.e. process lines and machinery, walls, floors, storage areas, pallets, etc.) must be cleaned and/or maintained according to the cleaning and maintenance schedule, with defined minimum frequency. Documented records of cleaning and maintenance must be kept.	Minor Must
FV . 5 . 4 . 2	Are cleaning agents, lubricants, etc. stored to prevent chemical contamination of produce?	Cleaning agents, lubricants etc. are kept in a designated area, away from where produce is packed, to avoid chemical contamination of produce.	Minor Must

N°	Control Point	Compliance Criteria	Level
FV . 5 . 4 . 3	Are cleaning agents, lubricants etc. that may come into contact with produce, approved for application in the food industry? Are dose rates followed correctly?	Documentary evidence exists (i.e. specific label mention or technical data sheet) authorising use for the food industry of cleaning agents, lubricants etc. which may come into contact with produce.	Minor Must
FV . 5 . 4 . 4	Are all forklifts and other driven transport trolleys clean and well maintained and of suitable type to avoid contamination through emissions?	Internal transport should be maintained to avoid product contamination, with special attention to fume emissions. Forklifts and other driven transport trolleys should be electric or gas-driven.	Recom.
FV . 5 . 4 . 5	Is rejected produce and waste material in the packing environment stored in designated areas, which are routinely cleaned and/or disinfected ?	Rejected produce and waste materials are stored in clearly designated and segregated areas designed to avoid contamination of products. These areas are routinely cleaned and/or disinfected according to the cleaning schedule.	Minor Must
FV . 5 . 4 . 6	Are breakage safe lamps or lamps with a protective cap used above the sorting, weighing and storage area?	Light bulbs and fixtures suspended above produce or material used for produce handling are of a safety type or are protected/shielded so as to prevent contamination of food in case of breakage.	Major Must
FV . 5 . 4 . 7	Are there written glass and clear hard plastic handling procedures in place?	Written procedures exist for handling glass or clear hard plastic breakages in produce handling, preparation and storage areas.	Minor Must
FV . 5 . 4 . 8	Are packing materials clean and stored in clean and hygienic conditions?	Packing materials (including re-useable crates) are stored in a clean and hygienic area, to prevent product contamination until used.	Minor Must
FV . 5 . 4 . 9	Is access of animals to the facilities restricted?	Measures are in place to prevent access by animals.	Minor Must
FV . 5 . 5	**Quality Control**		
FV . 5 . 5 . 1	Is a documented inspection process in place to ensure compliance with a defined quality standard?	An inspection process is in place to ensure products are packed according to documented quality standards.	Minor Must
FV . 5 . 5 . 2	Are temperature and humidity (where applicable) controls maintained and documented where produce are packed and/or stored on farm?	If packed produce are stored on farm, temperature and humidity controls (where applicable and also for controlled atmosphere storage) must be maintained and documented in accordance with the hygiene risk assessment results.	Major Must
FV . 5 . 5 . 3	For products that are sensitive to light (e.g. potatoes), is daylight ingress controlled in longer term storage facilities?	Check for no daylight ingress.	Major Must

N°	Control Point	Compliance Criteria	Level
FV . 5 . 5 . 4	Is stock rotation being managed?	Stock rotation must be managed to ensure maximum product quality and safety.	Recom.
FV . 5 . 5 . 5	Is there a process for verifying measuring and temperature control equipment?	Equipment used for weighing and temperature control, must be routinely verified to see if equipment is calibrated according to a risk analysis.	Minor Must
FV . 5 . 6	**Rodent and Bird Control**		
FV . 5 . 6 . 1	Are all entry points to buildings or equipment that may come into contact with them suitably protected to prevent, whenever practically possible, the ingress of rodents and birds?	Visual assessment. No N/A	Minor Must
FV . 5 . 6 . 2	Are there site plans with bait points and/or traps?	Site plan showing bait points must exist. No N/A.	Minor Must
FV . 5 . 6 . 3	Are baits placed in such a manner that non-target species do not have access?	Visual observation. Non-targeted species must not have access to the bait. No N/A.	Minor Must
FV . 5 . 6 . 4	Are detailed records of pest control inspections and necessary actions taken, kept?	Records of pest control inspections and follow up action plan(s). The producer can have his own records. Inspections must take place whenever there is evidence of presence of pests. In case of vermin, the producer must have a contact number of the pest controller or evidence of in-house capability to control pests.	Minor Must
FV . 5 . 7	**Post-Harvest Washing** (N/A when no post-harvest washing)		
FV . 5 . 7 . 1	Is the source of water used for final product washing potable or declared suitable by the competent authorities?	The water has been declared suitable by the competent authorities and/or within the last 12 months a water analysis has been carried out at the point of entry into the washing machinery. The levels of the parameters analysed are within accepted WHO thresholds or are accepted as safe for the food industry by the competent authorities.	Major Must
FV . 5 . 7 . 2	If water is re-circulated for final product washing, has this water been filtered and are pH, concentration and exposure levels to disinfectant routinely monitored?	Where water is re-circulated for final produce washing, it is filtered and disinfected, and pH, concentration and exposure levels to disinfectant are routinely monitored, with documented records maintained. Filtering must be done with an effective system for solids and suspensions that have a documented routine cleaning schedule according to the usage and water volume.	Major Must

N°	Control Point	Compliance Criteria	Level
FV . 5 . 7 . 3	Is the laboratory carrying out the water analysis a suitable one?	The water analysis for the product washing is undertaken by a laboratory currently accredited to ISO 17025 or its national equivalent or that can demonstrate via documentation that it is in the process of gaining accreditation.	Recom.
FV . 5 . 8	**Post-Harvest Treatments** (N/A when no post-harvest treatments)		
FV . 5 . 8 . 1	Are all label instructions observed?	There are clear procedures and documentation available, e.g. application records for post-harvest biocides, waxes and plant protection products, which demonstrate that the label instructions for chemicals applied are compliant.	Major Must
FV . 5 . 8 . 2	Are all the biocides, waxes and plant protection products used for post-harvest protection of the harvested crop officially registered in the country of use?	All the post harvest biocides, waxes and plant protection products used on harvested crop are officially registered or permitted by the appropriate governmental organisation in the country of application. They are approved for use in the country of application and are approved for use on the harvested crop to which it is applied as indicated on the biocides, waxes and crop protection products' labels. Where no official registration scheme exists, refer to the GLOBALGAP (EUREPGAP) guideline (CB Annex 2 PPP) on this subject and FAO International Code of Conduct on the Distribution and Use of Pesticides.	Major Must
FV . 5 . 8 . 3	Are only any biocides, waxes and plant protection products used on harvested crop destined for sale in the European Union that are not banned in the European Union?	The documented post harvest biocide, wax and crop protection product application records confirm that no biocides, waxes and crop protection products that have been used within the last 12 months on the harvested crop grown under GLOBALGAP (EUREPGAP) destined for sale within the E.U., have been prohibited by the E.U. (under EC Prohibition Directive List - 79/117/EC.)	Major Must
FV . 5 . 8 . 4	Is an up-to-date list maintained of post-harvest plant protection products that are used, and approved for use, on crops being grown?	An up to date documented list, that takes into account any changes in local and national legislation for biocides, waxes and plant protection products is available for the commercial brand names (including any active ingredient composition) that are used as post-harvest protection being, or which have been, grown on the farm under GLOBALGAP (EUREPGAP) within the last 12 months. No N/A.	Minor Must

N°	Control Point	Compliance Criteria	Level
FV . 5 . 8 . 5	Is the technically responsible person for the harvested crop handling process able to demonstrate competence and knowledge with regard to the application of biocides, waxes and plant protection products?	The technically responsible person for the post harvest biocides, waxes and plant protection products applications can demonstrate sufficient level of technical competence via nationally recognised certificates or formal training.	Major Must
FV . 5 . 8 . 6	Have the post-harvest biocides, waxes and plant protection product applications, including the harvested crops' identity (i.e. lot or batch of produce), been recorded ?	The lot or batch of harvested crop treated is documented in all post-harvest biocide, wax and plant protection product application records.	Major Must
FV . 5 . 8 . 7	Has the location of the post-harvest biocides, waxes and plant protection products applications been recorded?	The geographical area, the name or reference of the farm or harvested crop handling site where the treatment was undertaken is documented in all post-harvest biocide, wax and plant protection product application records.	Major Must
FV . 5 . 8 . 8	Have the application dates of the post-harvest biocide, wax and plant protection product been recorded?	The exact dates (day/month/year) of the applications are documented in all post-harvest biocide, wax and plant protection product application records.	Major Must
FV . 5 . 8 . 9	Has the type of treatment been recorded for the post-harvest biocide, wax and plant protection product applications?	The type of treatment used for product application (i.e. spraying, drenching, gassing etc.) is documented in all post-harvest biocide, wax and plant protection product application records.	Major Must
FV . 5 . 8 . 10	Has the product trade name of the post-harvest biocide, wax and plant protection product applications been recorded?	The trade name of the products applied are documented in all post-harvest biocide, wax and plant protection product application records.	Major Must
FV . 5 . 8 . 11	Has the product quantity applied of the post-harvest biocide, waxes and plant protection product applications been recorded?	The amount of product applied in weight or volume per litre of water or other carrier medium is recorded in all post-harvest biocide, wax and plant protection product applications records.	Major Must
FV . 5 . 8 . 12	Has the name of the operator of the post-harvest biocide, wax and plant protection product applications been recorded?	The name of the operator who has applied the plant protection product to the harvested crop is documented in all post-harvest biocide, wax and plant protection product application records.	Minor Must
FV . 5 . 8 . 13	Has the justification for application for the post-harvest biocide, wax and plant protection product applications been recorded?	The common name of the pest, disease to be treated is documented in all post-harvest biocide, wax and plant protection product application records.	Minor Must

N°	Control Point	Compliance Criteria	Level
FV . 5 . 8 . 14	Are all of the post-harvest plant protection product applications also considered under points CB.8.6 of this document?	There is documentary evidence to demonstrate that the producer considers all post-harvest biocides and plant protection products applications under Control Points CB.8.6, and acts accordingly.	Major Must

EDITION UPDATE REGISTER

Control Points and Compliance Criteria Version	Replaces	Replaced document obsolete	New document comes into force	Description of Modifications
3.0-1_2July07	3.0-Mar07	2 July .2007	2 July .2007	Clarification of wording for Control Point: 5.8.3 Clarification of wording for Compliance Criterion: 5.3.1; 5.3.3; 5.3.4
3.0-2_Sep07	3.0-1_2July07	30. Sep 07	30. Sep 07	Modification GLOBALGAP (EUREPGAP); Clarification of wording for Compliance Criteria: 5.3.4

1. For detailed information of the modifications please contact GLOBALGAP Secretariat for the History document.
2. When the changes do not affect the accreditation of the standard, the version will remain "3.0" and edition update shall be indicated with "-x".
3. When the changes do affect the accreditation of the standard, the version name will change to "3.x".

APPENDIX B

GLOBALG.A.P.
(EUREPGAP)

Control Points and Compliance Criteria
Integrated Farm Assurance

INTRODUCTION

English Versions
V.3.0-3_Apr09
Valid from 29 April 2009

CONTENTS

INTRODUCTION

Principles

This document sets out a framework for Good Agricultural Practices (G.A.P.) on farms which defines essential elements for the development of best-practice for the global production of crops, livestock, and aquaculture acceptable to the leading retail groups worldwide. However, standards for some individual retailers and those adapted by some producers may exceed those described. This document does not set out to provide prescriptive guidance on every method of agricultural production.

GLOBALGAP (EUREPGAP) members wish to recognise the significant progress already made by many producers, producer groups, producer organisations, local schemes and national schemes in developing and implementing best-practice agricultural systems. GLOBALGAP (EUREPGAP) members also wish to encourage further work to improve producers capability in this area, and in this respect this GAP framework, which defines the key elements of current good agricultural best-practice, should be used as benchmark to assess current practice and provide guidance for further development.

The modular composition of Integrated Farm Assurance enables producers to combine multiple audits for multiple products into one single audit.

GLOBALGAP (EUREPGAP) offers several benefits to producers:

1. Reducing Food Safety risks in Global Primary Production

Encouraging the development and adoption of national and regional farm assurance schemes

Clear risk assessed HACCP based reference standard serving the consumer and food chain

A technical communication platform for continuous improvement and transparency through consultation across the entire food chain

2. Reducing Cost of Compliance

Avoiding multiple product audits on mixed farming enterprises by a single “one-stop-shop”

Avoiding the proliferation of buyer requirements, as committed GLOBALGAP (EUREPGAP) Retailer and Food Service Members shift their supply to GLOBALGAP (EUREPGAP) approved sources over time

Avoid excess regulatory burden by pro-active adoption by industry

Achieving global harmonisation leading to a more level playing field

Producers choose from certification bodies strictly regulated by GLOBALGAP

3. Increasing the Integrity of Farm Assurance Schemes worldwide by

Defining and enforcing a common level of auditor competence

Defining and enforcing a common level of verification status report

Defining and enforcing a common level of action on non-compliances

Harmonising interpretation of compliance criteria

Independent Verification:

Producers receive their GLOBALGAP approval through independent verification from a certification body that is approved by GLOBALGAP.

The Scheme documents are:
1. **GLOBALGAP (EUREPGAP) General Regulations** which sets out the rules by which the standard will be administered.
2. **GLOBALGAP (EUREPGAP) Control Points and Compliance Criteria (CPCC)** is the standard with which the producer must comply, and which gives specific details on each of the requirements.
3. **GLOBALGAP (EUREPGAP) Checklist** which forms the basis of the producer external audit and which the producer and producer groups must use to fulfil the annual internal assessment

As described in GLOBALGAP (EUREPGAP) General Regulations, this scheme is divided into Major Musts, Minor Musts and Recommendations.

All control points must be audited externally, as well as included in self-assessments (Option 1) and internal group inspections (Option 2). The possible answers are: compliance (yes), non-compliance (no) or Not Applicable (N/A). **Where the answer is Not Applicable, a justification must be presented.** The N/A verdict cannot be given to those control points where the Compliance Criteria specify "No N/A". **Evidence must be given for all Major Must Control Points**.

The GLOBALGAP (EUREPGAP) IFA CPCC document is separated into different modules, each one covering different areas or levels of activity on a production site.
These sections are grouped into:
1. "Scopes" covering more generic production issues, classified more broadly (All Farm Base, Crops Base, Livestock Base and Aquaculture Base).
2. "Sub-scopes" covering specific production details, classified per product type (Fruit and Vegetables, Combinable Crops, Coffee (green), Tea, Flowers and Ornamentals, Cattle & Sheep, Pigs, Dairy, Poultry, Salmon and Trout and any sub-scopes that might be added during the validity period of this document)

Legislation overrides GLOBALGAP (EUREGAP) where relevant legislation is more demanding. The compliance level for legislation is a "Major Must". Where there is no legislation (or legislation is not so strict), GLOBALGAP (EUREPGAP) provides a minimum acceptable level of compliance. No matter what the required level of compliance is in GLOBALGAP (EUREPGAP), any applicable legislation that is stricter than GLOBALGAP (EUREPGAP) must be complied with in the country where the producer is operating.

Reference guidelines are provided separately and are updated independently of this document as needed. Users should always refer to the latest reference guidelines, available on www.globalgap.org

Disclaimer:

FoodPLUS GmbH and GLOBALGAP approved Certification Bodies are not legally liable for the safety of the product certified under this Standard. Under no circumstances shall FoodPLUS GmbH, its employees or agents be liable for any losses, damage, charges, costs or expenses of whatever nature (including consequential loss) which any producer may suffer or incur by reason of, or arising directly or indirectly from the administration by FoodPLUS GmbH, its employees or agents or the performance of their respective obligations in connection with the Scheme save to the extent that such loss, damage, charges, costs and/or expenses arise as a result of the finally and judicially determined gross negligence or wilful default of such person.

Registration:

Please refer to the GLOBALGAP (EUREPGAP) General Regulations Part I - General Information for instructions on Registration and Certification process.

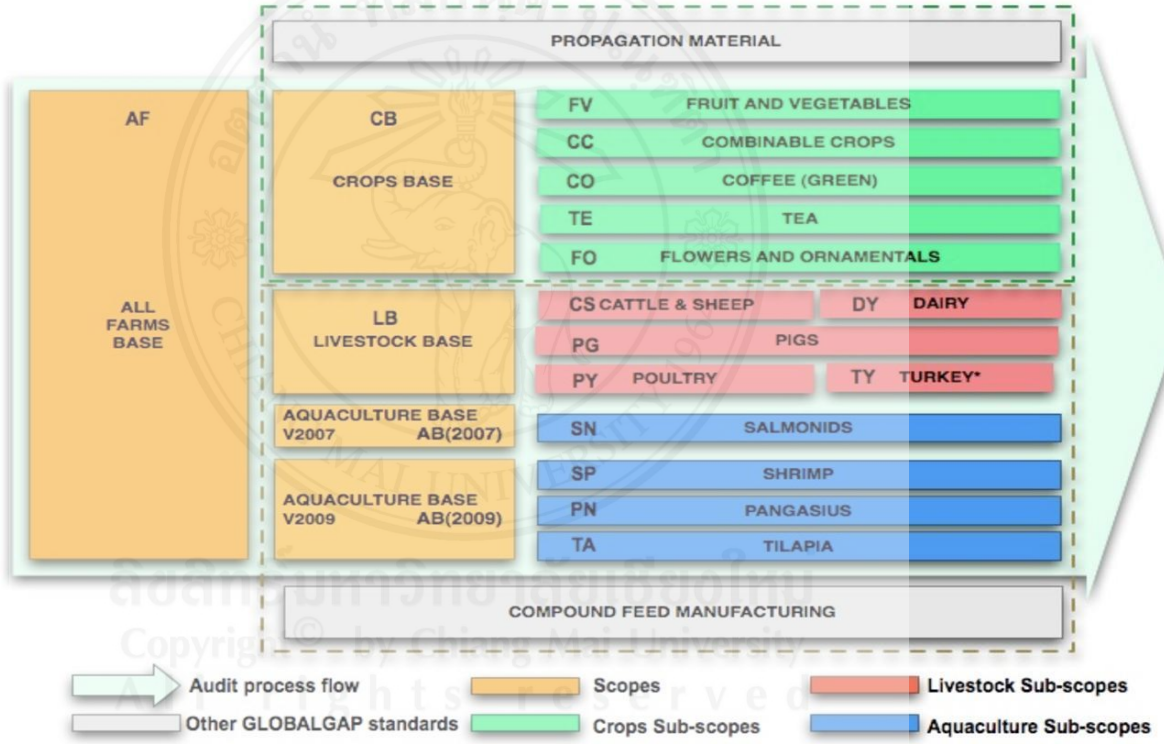
Definitions:

Please refer to Annex I.1 of the General Regulations for definition of terms used within this document.

Reference Documents (not specifically mentioned in the CPCCs):

GLOBALGAP (EUREPGAP) General Regulations
European Initiative for Sustainable Development in Agriculture - European Integrated Farming Framework, 2006.

Standard Structure:



EDITION UPDATES REGISTER

Control Points and Compliance Criteria Version	Replaces	Replaced document obsolete	New document comes into force	Description of Modifications
3.0-1_2July07	3.0-Mar07	2 July .2007	2 July .2007	Modification of All Farm module
3.0-2_Sep07	3.0-1_2July07	30-Sep-07	30-Sep-07	Modification GLOBALGAP (EUREPGAP)
3.0-3_Apr09	3.0-2_Sep07	29-Apr-09	29-Apr-09	Inclusion of Tilapia and Pangasius sub-scopes

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GLOBALG.A.P.
(EUREPGAP)

Control Points and Compliance Criteria
Integrated Farm Assurance

ALL FARM BASE

English Version
V3.0-2_Sep07

Valid from 30 September 2007

CONTENTS

N°	Control Point	Compliance Criteria	Level
AF	**ALL FARM BASE**		
	Control points in this module are applicable to all producers seeking certification as it covers issues relevant to all farming businesses.		
AF . 1	**RECORD KEEPING AND INTERNAL SELF-ASSESSMENT/INTERNAL INSPECTION**		
	Important details of farming practices should be recorded and records kept.		
AF . 1 . 1	Are all records requested during the external inspection accessible and kept for a minimum period of time of two years, unless a longer requirement is stated in specific control points?	Producers keep up to date records for a minimum of two years from the date of first inspection, unless legally required to do so for a longer period. No N/A. (For Livestock certification, cross check with LB.3.2, PG.1.3 and PG.4.3 where documents are required for 3 years)	Minor Must
AF . 1 . 2	Does the producer or producer group take responsibility to undertake a minimum of one internal self-assessment or producer group internal inspection, respectively, per year against the GLOBALGAP (EUREPGAP) Standard?	There is documentary evidence that the GLOBALGAP (EUREPGAP) or benchmarked standard internal self-assessment/internal producer group inspections under responsibility of the producer/producer group ha(s)ve been carried out and are recorded annually. No N/A.	Major Must
AF . 1 . 3	Are effective corrective actions taken as a result of non-conformances detected during the internal self-assessment or internal producer group inspections?	Effective corrective actions are documented and have been implemented. No N/A	Major Must
AF . 2	**SITE HISTORY AND SITE MANAGEMENT**		
	One of the key features of sustainable farming is the continuous integration of site specific knowledge and practical experiences into future management planning and practices. This section is intended to ensure that the land, buildings and other facilities, which constitute the fabric of the farm, are properly managed to ensure the safe production of food and protection of the environment.		
AF . 2 . 1	**Site History**		
AF . 2 . 1 . 1	Is a recording system established for each unit of production or other area/location to provide a permanent record of the livestock/aquaculture production and/or agronomic activities undertaken at those locations? Are these records kept in an ordered and up-to-date fashion?	Current records must provide a history of GLOBALGAP (EUREPGAP) production of all production areas. For Crops: New applicants must have full records for at least three months prior to the date of external inspection that reference each area covered by a crop with all the agronomic activities related to GLOBALGAP (EUREPGAP) documentation required of this area; and for Livestock and Aquaculture: these records must go back at least one rotation. No N/A	Major Must
AF . 2 . 1 . 2	Is a reference system for each field, orchard, greenhouse, yard, plot, livestock building or other area/location used in production established and referenced on a farm plan or map?	Compliance must include visual identification in the form of a physical sign at each field/greenhouse/plot/livestock building/pen or other farm, or a farm plan or map that could be cross referenced to the identification system. No N/A.	Minor Must

N°	Control Point	Compliance Criteria	Level
AF . 2 . 2	**Site Management**		
AF . 2 . 2 . 1	Is there a risk assessment for new agricultural sites (i.e. crop, livestock or aquaculture enterprises) or existing sites only where risks have changed, which shows the site in question to be suitable for production, with regards to food safety, operator health, the environment and animal health where applicable?	A documented risk assessment must be carried out when crops, livestock or aquaculture enterprises are to be introduced onto new sites. The risk assessment must be revised to take into account any new food safety risks. The risk assessment must take account site history (crops/stocking) and consider impact of proposed enterprises on adjacent stock/crops/environment (see AF Annex 1 Risk Assessment to determine when a risk assessment is needed). For Tea and Coffee certification, cross reference with TE.2.1.1 and CO.2.1.1, respectively	Major Must
AF . 2 . 2 . 2	Has a management plan been developed setting out strategies to minimise all identified risks, such as pollution or water table contamination? Are the results of this analysis recorded and used to justify that the site in question is suitable?	A management plan that has implemented strategies to meet the objectives of this specific control point has been developed.(This plan should include one or more of the following: habitat quality, soil compaction, soil erosion, emisiion of greenhouses gases where applicable, humus balance, phosphorus balance, nitrogen balance, intensity of chemical plant protection).	Minor Must
AF . 3	**WORKERS HEALTH, SAFETY AND WELFARE**		
	People are key to the safe and efficient operation of any farm. Farm staff and contractors as well as producers themselves stand for the quality of the produce and for environmental protection. Education and training will help progress towards sustainability and build on social capital. This section is intended to ensure safe practice in the work place and that all workers understand, and are competent to perform their duties; are provided with proper equipment to allow them to work safely; and that, in the event of accidents, proper and timely assistance can be obtained.		
AF . 3 . 1	**Risk Assessments**		
AF . 3 . 1 . 1	Does the farm have a written risk assessment for safe and healthy working conditions?	The written risk assessment can be a generic one but it must be appropriate for conditions on the farm. The risk assessment must be reviewed and updated when changes in the organisation (e.g. other activities) occur. No N/A.	Minor Must
AF . 3 . 1 . 2	Does the farm have a written health, safety and hygiene policy and procedures including issues of the risk assessment of AF.3.1.1?	The health, safety and hygiene policy must at least include the points identified in the risk assessment (AF.3.1.1). This could include accident and emergency procedures, hygiene procedures, dealing with any identified risks in the working situation, etc. The policy must be reviewed and updated when the risk assessment changes.	Minor Must

N°	Control Point	Compliance Criteria	Level
AF . 3 . 2	**Training**		
AF . 3 . 2 . 1	Is there a record kept for training activities and attendees?	A record is kept for training activities including the topic covered, the trainer, the date and attendees. Evidence of the attendance is required.	Minor Must
AF . 3 . 2 . 2	Do all workers handling and/or administering veterinary medicines, chemicals, disinfectants, plant protection products, biocides or other hazardous substances and all workers operating dangerous or complex equipment as defined in the risk assessment in AF.3.1.1 have certificates of competence, and/or details of other such qualifications?	Records must identify workers who carry out such tasks, and show certificates of training or proof of competence. No N/A	Major Must
AF . 3 . 2 . 3	Have all workers received adequate health and safety training and are they instructed according to the risk assessment in AF.3.1.1?	Workers can demonstrate competency in responsibilities and tasks through visual observation. If at time of inspection there are no activities, there must be evidence of instructions. No N/A.	Minor Must
AF . 3 . 2 . 4	Is there always an appropriate number of persons (at least one person) trained in first aid present on each farm whenever on-farm activities are being carried out?	There is always at least one person trained in First Aid (within the last 5 years) present on the farm whenever on-farm activities are being carried out. Applicable legislation on First Aid training must be followed where it exists. On-farm activities include all activities performed during all applicable chapters and modules .	Minor Must
AF . 3 . 2 . 5	Does the farm have documented hygiene instructions?	The hygiene instructions are visibly displayed: provided by way of clear signs (pictures) or in the predominant language(s) of the workforce. The instructions must at least include: - the need for hand cleaning; - the covering of skin cuts; - limitation on smoking, eating and drinking to certain areas; - notification of any relevant infections or conditions; - the use of suitable protective clothing.	Minor Must
AF . 3 . 2 . 6	Have all persons working on the farm received basic hygiene training according to the hygiene instructions in AF.3.2.5?	Both written and verbal training are given as an induction training course for hygiene. Training are provided by qualified people. All new workers must receive this training and confirm their participation with a signature. All instructions from AF.3.2.5 must be covered in this training. All workers, including the owners and managers, at any time of the year have reviewed and signed for the farm's hygiene instructions.	Minor Must

N°	Control Point	Compliance Criteria	Level
AF . 3 . 2 . 7	Are the farm's hygiene procedures implemented?	Workers with tasks identified in the hygiene procedures must demonstrate competence during the inspection. No N/A.	Minor Must
AF . 3 . 2 . 8	Are all subcontractors and visitors aware of the relevant procedures on personal safety and hygiene?	There is evidence that the relevant procedures on personal health, safety and hygiene are officially communicated to visitors and subcontractors (e. g. relevant instructions are in a visible place where all visitors or subcontractors can read them).	Minor Must
AF . 3 . 3	**Hazards and First Aid**		
AF . 3 . 3 . 1	Do accident and emergency procedures exist, are they visually displayed and communicated to all persons associated with the farm activities?	Permanent accident procedures must be clearly displayed in accessible, and visible location(s).These instructions are available in the predominant language(s) of the workforce and/or pictograms. The procedures must identify, if appropriate the following; E.g.: - farm's map reference or farm address - contact person(s) - location of the nearest means of communication (telephone, radio) - an up-to-date list of relevant phone numbers (police, ambulance, hospital, fire-brigade, access to emergency health care on site or by means of transport, electricity and water supplier); - how and where to contact the local medical services, Hospital and other emergency services. - location of fire extinguisher; - emergency exits; - emergency cut-offs for electricity, gas and water supplies. - how to report accidents or dangerous incidents.	Minor Must
AF . 3 . 3 . 2	Are potential hazards clearly identified by warning signs and placed where appropriate?	Permanent and legible signs must indicate potential hazards, e.g. waste pits, fuel tanks, workshops, access doors of the plant protection product / fertiliser / any other chemical storage facilities as well as the treated crop etc. Warning signs must be present. No N/A.	Minor Must
AF . 3 . 3 . 3	Is safety advice available/accesible for substances hazardous to worker health, when required?	Information (e.g. website, tel no, data sheets, etc.) is accessible, when required, to ensure appropriate action.	Minor Must

N°	Control Point	Compliance Criteria	Level
AF . 3 . 3 . 4	Are First Aid kits present at all permanent sites and in the vicinity of field-work?	Complete and maintained first aid kits according to national regulations and recommendations must be available and accessible at all permanent sites and available for transport to the vicinity of the work.	Minor Must
AF . 3 . 4	**Protective Clothing/Equipment**		
AF . 3 . 4 . 1	Are workers (including subcontractors) equipped with suitable protective clothing in accordance with legal requirements and/or label instructions or as authorised by a competent authority?	Complete sets of protective clothing, (e.g. rubber boots, waterproof clothing, protective overalls, rubber gloves, face masks, etc.) which enable label instructions and/or legal requirements and/or requirements as authorised by a competent authority to be complied with are available, used and in a good state of repair. This includes appropriate respiratory, ear and eye protection devices and life-jackets, where necessary.	Major Must
AF . 3 . 4 . 2	Is protective clothing cleaned after use and stored so as to prevent contamination of the clothing or equipment?	Protective clothing is regularly cleaned, according to a schedule adapted to the type of use and degree of soiling. Cleaning the protective clothing and equipment includes the separate washing from private clothing and glove washing before removal. Dirty, torn and damaged protective clothing and equipment and expired filter cartridges should be disposed of. Single-use items (e.g. gloves, overalls, etc.) have to be disposed of after one use. All the protective clothing and equipment including replacements filters etc., are stored apart and physically separate from the plant protection products/ any other chemicals which might cause contamination of the clothing or equipment in a well-ventilated area. No N/A.	Major Must
AF . 3 . 5	**Worker Welfare**		
AF . 3 . 5 . 1	Is a member of management clearly identifiable as responsible for workers health, safety and welfare?	Documentation is available that demonstrates that a clearly identified, named member of management has the responsibility for ensuring compliance with existing, current and relevant national and local regulations and the implementation of the policy on workers health safety and welfare.	Major Must

N°	Control Point	Compliance Criteria	Level
AF . 3 . 5 . 2	Do regular two way communication meetings take place between management and workers ? Are there records from such meetings?	Records show that the concerns of the workers about health, safety and welfare are being recorded in meetings planned and held at least once a year between management and workers at which matters related to the business and worker health, safety or welfare can be discussed openly (without fear of intimidation or retribution). The auditor is not required to make judgments about the content, accuracy or outcome of such meetings.	Recom.
AF . 3 . 5 . 3	Is there information available that provide an accurate overview over all workers of the farm?	Records demonstrate clearly an accurate overview over all workers (including seasonal workers) and subcontractors working on the farm. Information must be available of full names, date of entry, the period of employment and, the regular working time and overtime regulations. Records of all workers (also subcontractors) which provide the required information must be kept for the last 24 months from the date of first inspection. See AF.3.6.1 as requirement for subcontractors.	Minor Must
AF . 3 . 5 . 4	Do workers have access to clean food storage areas, designated dining areas, hand washing facilities and drinking water?	A place to store food and to eat must be available. In addition, hand washing facilities and potable drinking water must be available to workers.	Minor Must
AF . 3 . 5 . 5	Are on site living quarters habitable and have the basic services and facilities?	The living quarters for the workers on farm are habitable, have a sound roof, windows and doors, and have the basic services of running water, toilets, drains. In case of no drains, septic pits can be accepted when proven to be hermetic.	Minor Must
AF . 3 . 6	**Subcontractors**		
AF . 3 . 6 . 1	When the producer makes use of subcontractors, is all the relevant information available on farm?	Subcontracors must carry out an assessment (or the producer must do it on behalf of the subcontractor) of compliance against the GLOBALGAP (EUREPGAP) control points relevant to the services provided on farm (including AF.3.5.3).This assessment must be available on farm during the external inspection and the subcontractor must accept that GLOBALGAP (EUREPGAP) approved certifiers are allowed to verify the assessments through a physical inspection where there is doubt. The producer is responsible for observance of the control points applicable to the tasks performed by the subcontractor by checking and signing the assessment of the subcontractor for each task and season contracted.	Minor Must

N°	Control Point	Compliance Criteria	Level
AF . 4	**WASTE AND POLLUTION MANAGEMENT, RECYCLING AND RE-USE**		
	Waste minimisation should include: review of current practices, avoidance of waste, reduction of waste, re-use of waste, and recycling of waste.		
AF . 4 . 1	**Identification of Waste and Pollutants**		
AF . 4 . 1 . 1	Have all possible waste products and sources of pollution been identified in all areas of the business?	All possible waste products (such as paper, cardboard, plastic, oil, etc) and sources of pollution (e.g. fertiliser excess, exhaust smoke, oil, fuel, noise, effluent, chemicals, sheep-dip, feed waste, dead or diseased fish, algae produced during net cleaning, etc) produced by the farm processes have been listed.	Minor Must
AF . 4 . 2	**Waste and Pollution Action Plan**		
AF . 4 . 2 . 1	Is there a documented farm waste management plan to avoid or reduce wastage and pollution and avoid the use of landfill or burning, by waste recycling? Are organic wastes composted on the farm and utilised for soil-conditioning, provided there is no risk of disease carry-over?	A comprehensive, current, documented plan that covers wastage reduction, pollution and waste recycling is available. Air, soil, water, noise and light contamination must be considered.	Recom.
AF . 4 . 2 . 2	Has this waste management plan been implemented?	There are visible actions and measures on the farm that confirm that the objectives of the waste and pollution action plan are being carried out.	Recom.
AF . 4 . 2 . 3	Are the farm and premises clear of litter and waste to avoid establishing a breeding ground for pests and diseases which could result in a food safety risk?	Visual assessment that there is no evidence of breeding grounds in areas of waste/litter in the immediate vicinity of the production or storage buildings. Incidental and insignificant litter and waste on the designated areas are acceptable as well as the waste from the current day's work. All other litter and waste has been cleared up. Areas where produce is handled indoors are cleaned at least once a day.	Major Must
AF . 4 . 2 . 4	Do the premises have adequate provisions for waste disposal?	The farm has designated areas to store litter and waste. Different types of waste are identified and stored separately.	Recom.

N°	Control Point	Compliance Criteria	Level
AF . 5	**ENVIRONMENT AND CONSERVATION**		
	Farming and environment are inseparably linked. Managing wildlife and landscape is of great importance; enhancement of species as well as structural diversity of land and landscape features will benefit the abundance and diversity of flora and fauna.		
AF . 5 . 1	**Impact of Farming on the Environment and Biodiversity** (cross-reference with AB.7.5 Aquaculture Base for certification of Aquaculture sub-scopes)		
AF . 5 . 1 . 1	Does each producer have a management of wildlife and conservation plan for the enterprise that acknowledges the impact of farming activities on the environment?	There must be a written action plan which aims to enhance habitats and increase biodiversity on the farm. This can be either a regional activity or individual plan, if the farm is participating in or covered by it. This includes knowledge of IPM practices, of nutrient use of crops, conservation sites etc.	Minor Must
AF . 5 . 1 . 2	Has the producer considered how to enhance the environment for the benefit of the local community and flora and fauna?	There should be tangible actions and initiatives that can be demonstrated by the producer either on the production site or by participation in a group that is active in environmental support schemes looking at habitat quality and habitat elements.	Recom.
AF . 5 . 1 . 3	Is this policy compatible with sustainable commercial agricultural production and does it minimise environmental impact of the agricultural activity?	The contents and objectives of the conservation plan imply compatibility with sustainable agriculture and demonstrate a reduced environmental impact.	Recom.
AF . 5 . 1 . 4	Does the plan include a baseline audit to understand existing animal and plant diversity on the farm?	There is a commitment within the conservation plan to undertake a base line audit of the current levels, location, condition etc. of the fauna and flora on farm so as to enable actions to be planned. The effects of agricultural production on fauna and flora should be audited and serve as the basis for the action plan. Refer to points CO.10.1 for Coffee and TE.11.1 for Tea certification.	Recom.
AF . 5 . 1 . 5	Does the plan include action to avoid damage and deterioration of habitats on the farm?	Within the conservation plan there is a clear list of priorities and actions to rectify damaged or deteriorated habitats on the farm. Refer to points CO.10.1 for Coffee and TE.11.1 for Tea certification.	Recom.
AF . 5 . 1 . 6	Does the plan include activities to enhance habitats and increase bio-diversity on the farm?	Within the conservation plan there is a clear list of priorities and actions to enhance habitats for fauna and flora where viable and increase bio-diversity on the farm. Refer to points CO.10.1 for Coffee and TE.11.1 for Tea certification.	Recom.

N°	Control Point	Compliance Criteria	Level
AF . 5 . 2	**Unproductive Sites**		
AF . 5 . 2 . 1	Has consideration been given to the conversion of unproductive sites (e.g. low lying wet areas, woodlands, headland strip or areas of impoverished soil) to conservation areas for the encouragement of natural flora and fauna?	There should be a plan to convert unproductive sites and identified areas which give priority to ecology into conservation areas where viable.	Recom.
AF . 5 . 3	**Energy Efficiency**		
AF . 5 . 3 . 1	Can the producer show monitoring of energy use on the farm?	Energy use records exist. For example, farming equipment shall be selected and maintained for optimum consumption of energy. The use of non-renewable energy sources should be kept to a minimum. (Cross reference with CO.10.2 for Coffee and TE.11.2 for Tea certification).	Recom.
AF . 6	**COMPLAINTS**		
	Management of complaints will lead to a better system and compliance with the GLOBALGAP (EUREPGAP) requirements.		
AF . 6 . 1	Is there a complaint procedure available relating to issues covered by the GLOBALGAP (EUREPGAP) standard?	There must be available on request, a clearly identifiable document for complaints relating to issues covered by GLOBALGAP (EUREPGAP). No N/A.	Major Must
AF . 6 . 2	Does the complaints procedure ensure that complaints are adequately recorded, studied and followed up including a record of actions taken?	There are documents of the actions taken with respect to such complaints regarding GLOBALGAP (EUREPGAP) standard deficiencies found in products or services. No N/A.	Major Must
AF . 7	**TRACEABILITY**		
AF . 7 . 1	Do all producers have a documented recall procedure to manage the withdrawal of registered products from the market?	All producers must have access to documented procedures which identify the type of event that may result in a withdrawal, persons responsible for taking decisions on the possible withdrawal of product, the mechanism for notifying customers and the GLOBALGAP (EUREPGAP) CB (if a sanction was not issued by the CB and the producer or group recalled the products out of free will) and methods of reconciling stock. The procedures must be tested annually to ensure that it is sufficient.	Major Must

ANNEX AF.1 GLOBALGAP (EUREPGAP) GUIDELINE | RISK ASSESSMENT FOR NEW SITES

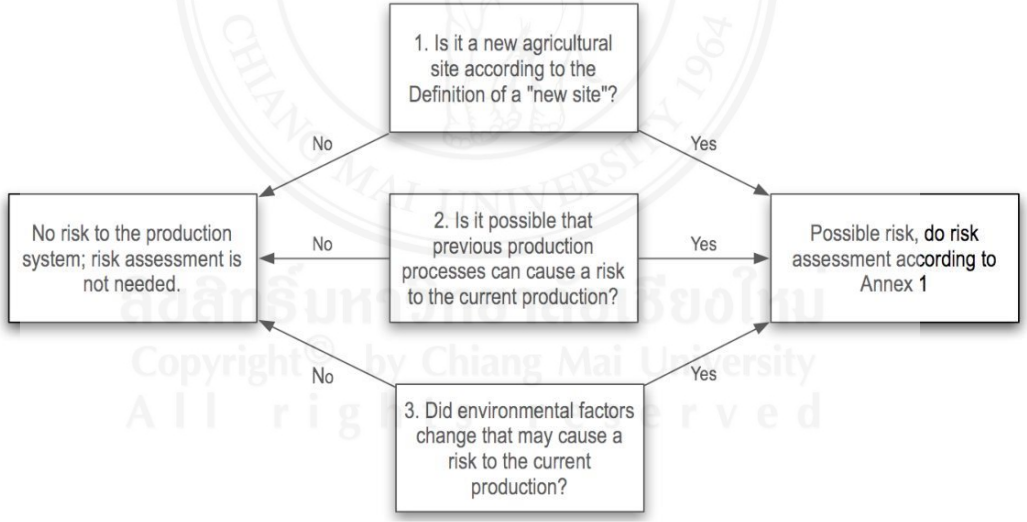
Control Point:

Is there a risk assessment for new agricultural sites (i.e. crop, livestock or aquaculture enterprises) or existing sites only where risks have changed, which shows the site in question to be suitable for production, with regards to food safety, operator health, the environment and animal health where applicable?

Compliance Criteria:

A documented risk assessment must be carried out when crops, livestock or aquaculture enterprises are to be introduced onto new sites. The risk assessment must be revised to take into account any new food safety risks. The risk assessment must take into account site history (crops/stocking) and consider impact of proposed enterprises on adjacent stock/crops/environment (see GLOBALGAP (EUREPGAP) Guidelines for Risk Assessment and to determine when a risk assessment is needed Annex 1). For Tea and Coffee certification, cross reference with TE.2.1.1 and CO.2.1.1, respectively.

If the answer to any of the 3 questions above is yes, a Risk Assessment is needed.



Legislation:

Local regulations should be checked first of all to verify legal compliance.

Prior use of land should cover:

Previous crops.
For example, cotton farmers are heavy users of residual herbicides that can have long-term effects on later cereal and other crops.
Industrial or military use.
For example, former vehicle parks may have considerable petroleum contamination.
Landfill or mining sites.
May have unacceptable wastes in their subsoil that can contaminate subsequent crops, or be subject to sudden subsidence endangering persons working on the land.
Natural vegetation
Might harbour pests, diseases, and weeds

Type of soil should cover:

Structural suitability for intended crops
Structural susceptibility to erosion
Chemical suitability for intended crops
Erosion:

The study should determine if there are, or could be, uneven losses of topsoil that may affect crop yields, and affect land and water downstream.
Landform
Drainage patterns:

Liability to flooding and/or erosion
Conformation & slope:

Erosion of the soil
Safety of persons operating machinery:

Transportation of the harvested crop
Wind exposure:

Excessive wind speeds can cause crop losses

Evaluation of Water should cover:

Water quality:

To be determined by the local authority to be fit for purpose or if there is no local standard, then results from appropriate laboratories, capable of performing chemical and/or microbiological analyses up to ISO 17025 level, or equivalent standard, must be available to show that irrigation water quality complies with the criteria as set out in Table 3, p39 of the WHO Health Guideline for the use of wastewater in Agriculture and Aquaculture. (see Table at end of document).

Availability:

Adequacy throughout the year, or at least the proposed growing season.

Authorization for use:

Assurance of the predicted quantities required by the crop.
Rights of other users
Local laws or customs may recognize other users whose needs may pre-empt agricultural use at times.
Environmental impact
While legal, some extraction rates could adversely affect flora and fauna associated with or dependent on the watersource

Impact analysis should cover:

Internal:

Dust, smoke and noise problems caused by operation of agricultural machinery.
Contamination of downstream sites by silt-laden or chemical-laden runoff.
Spray drift
Insects attracted by the crop, its waste, or manuring operations

External:

Smoke, fumes and dust from nearby industrial or transport installations including roads with heavy traffic
Silt-laden or chemical-laden runoff from upstream farming operations
Depredations by pests from nearby natural or conservation areas
Theft by inhabitants of nearby communities
Adjacent farming activities
Availability of adequate transport to markets
Availability of adequate labour
Availability of inputs

Table 3. Recommended microbiological quality guidelines for wastewater use in agriculture [a]

Category	Reuse conditions	Exposed groups	Intestinal nematodes[b] (arithmetic mean no. or eggs per litre[c])	Faecal coliforms (geometric mean no. per 100ml[c])	Wastewater treatment expected to achieve the required microbiological quality
A	Irrigation of crops likely to be eaten uncooked, sports field, public parks[d]	Workers, consumers, public	Less and equal to 1	Less and equal to 1000[d]	A series of stabilization ponds designed to achieve the microbiological quality indicated, or equivalent treatment.
B	Irrigation of cereal crops, industrial crops, fodder crops, pasture and trees[e]	Workers	Less and equal 1	No standard recommended	Retention in stabilization ponds for 8-10 days or equivalent helminth and faecal coliform removal.
C	Localised irrigation of crops in category B if exposure of workers and the public does not occur.	None	Not applicable	Not applicable	Pretreatment as required by the irrigation technology, but not less than primary sedimentation.

[a] In specific cases, local epidemiological, sociocultural and environmental factors should be taken into account, and the guidelines modified accordingly.
[b] *Ascaris* and *Trichuris* species and hookworms.
[c] During the irrigation period
[d] A more stringent guideline (less and equal to 200 faecal coliforms per 100ml) is appropriate for public lawns, such as hotel lawns, with which the public may come into direct contact.
[e] In the case of fruit trees, irrigation should cease two weeks before fruit is picked, an no fruit should be picked off the ground. Sprinkler irrigation should not be used.

*Source: Health guidelines for the use of wastewater in agriculture and aquaculture, WHO Technical Report Series 778, 1989.

EDITION UPDATES REGISTER

Control Points and Compliance Criteria Version	Replaces	Replaced document obsolete	New document comes into force	Description of Modifications
3.0-1_2July07	3.0-Mar07	2 July .2007	2 July .2007	Clarification of wording for Control Points: 2.1.1; 3.2.3; 3.3.1 Clarification of wording for Compliance Criteria: 2.2.2; 3.2.7; 5.1.2; 5.1.4; 5.2.1
3.0-2_Sep07	3.0-1_2July07	30-Sep-07	30-Sep-07	Modification GLOBALGAP (EUREPGAP); Clarification of wording for Compliance Criteria: 1.1; 3.5.2

1. For detailed information of the modifications please contact GLOBALGAP Secretariat for the History document.
2. When the changes do not affect the accreditation of the standard, the version will remain "3.0" and edition update shall be indicated with "-x".
3. When the changes do affect the accreditation of the standard, the version name will change to "3.x".

GLOBALG.A.P.
(EUREPGAP)

Control Points and Compliance Criteria
Integrated Farm Assurance
CROPS BASE

English Version
V.3.0-3_Feb09

Valid from 16 February 2009

CONTENTS

N°	Control Point	Compliance Criteria	Level
CB	**CROPS BASE**		
CB . 1	**TRACEABILITY**		
	Traceability facilitates the withdrawal of foods and enables customers to be provided with targeted and accurate information concerning implicated products.		
CB . 1 . 1	Is GLOBALGAP (EUREPGAP) registered product traceable back to and trackable from the registered farm (and other relevant registered areas) where it has been grown?	There is a documented identification and traceability system that allows GLOBALGAP (EUREPGAP) registered product to be traced back to the registered farm or, in a Farmer Group, to the registered farms of the group, and tracked forward to the immediate customer. Harvest information must link a batch to the production records or the farms of specific producers. (Refer to General Regulations Part III for information on segregation in Option 2). Produce handling must also be covered if applicable. No N/A.	Major Must
CB . 2	**PROPAGATION MATERIAL**		
	The choice of propagation material plays an important role in the production process and by using the correct varieties can help reduce the number of fertiliser and plant protection product applications. The choice of propaggation material is a precondition of good plant growth and product quality.		
CB . 2 . 1	**Quality and Health**		
CB . 2 . 1 . 1	Is there a document that guarantees seed quality (free from injurious pests, diseases, virus, etc.) ?	A record/certificate of the seed quality is kept and available and states variety purity, variety name, batch number and seed vendor.	Recom.
CB . 2 . 1 . 2	Are quality guarantees or certified production guarantees documented for purchased propagation material?	There are records to show that propagation material is complying with national legislation or in its absence, sector organisation guidelines and fit for purpose, i.e. quality certificate, terms of deliverance, signed letters or supplied by a nursery that has GLOBALGAP (EUREPGAP) or GLOBALGAP (EUREPGAP) recognised certfication	Minor Must
CB . 2 . 1 . 3	Is purchased propagation material free of visible signs of pest and disease?	When plants have visible signs of pest and disease damage, a justification should be available (e.g. threshold for treatment).	Recom.

N°	Control Point	Compliance Criteria	Level
CB . 2 . 1 . 4	Are plant health quality control systems operational for in-house nursery propagation?	A quality control system that contains a monitoring system on visible signs of pest and diseases is in place and current records of the monitoring system must be available. Nursery means anywhere propagation material is produced, (including in-house grafting material selection). "Monitoring system" must include recording and identification of the mother plant or field of origin crop as applicable. Recording must be periodic at regular established intervals. If the cultivated trees or plants are intended for own use only (not sold), this will suffice. When rootstocks are used special attention has to be paid to the origin of the rootstocks through documentation.	Minor Must
CB . 2 . 2	**Pest and Disease Resistance**		
CB . 2 . 2 . 1	Does the producer consider pest and disease resistance/tolerance characteristics during variety selection?	The producer is able to demonstrate awareness of variety pest and disease resistance/tolerance when available and justify varietal selection.	Minor Must
CB . 2 . 3	**Chemical Treatments and Dressings**		
CB . 2 . 3 . 1	Is the use of seed/annual rootstocks treatments recorded?	When the seed or annual rootstock has been treated by the producer, there are records with the name of the product(s) used and its target(s) (pests and/or diseases). If the seed has been treated for preservation purposes by the supplier, evidence of the chemicals used must be kept (maintaining records/ seed packages, etc).	Minor Must
CB . 2 . 3 . 2	Are plant protection product treatments on in-house nursery propagation material applied during the plant propagation period recorded?	Records of plant protection product treatments applied during the plant propagation period for in-house plant nursery propagation are available and include requirements as set out in CB.8.2. No N/A	Minor Must
CB . 2 . 4	**Sowing/Planting**		
CB . 2 . 4 . 1	Does the producer keep records on sowing/planting methods, seed/planting rate, sowing/planting date?	Records of sowing/planting method, rate and date must be kept and be available.	Minor Must
CB . 2 . 5	**Genetically Modified Organisms (N/A if no Genetically Modified varieties are used)**		

N°	Control Point	Compliance Criteria	Level
CB . 2 . 5 . 1	Does the planting of or trials with GMO's comply with all applicable legislation in the country of production?	The registered farm or group of registered farms have a copy of the legislation applicable in the country of production and comply accordingly. Records must be kept of the specific modification and/or the unique identifier. Specific husbandry and management advice must be obtained.	Major Must
CB . 2 . 5 . 2	Is there documentation available when the producer is growing genetically modified organisms?	If GMO cultivars and/or products derived from genetic modification are used, documented records of planting, use or production of GMO cultivars and/or products derived from genetic modification are available.	Minor Must
CB . 2 . 5 . 3	Did the producer inform their direct clients of the GMO status of the product?	Documented evidence of communication must be provided.	Major Must
CB . 2 . 5 . 4	Is there a plan for handling GM material (crops and trials) setting out strategies to minimise contamination risks, such as accidental mixing of adjacent non-GM crops and maintaining product integrity?	There must be a written plan that explains how GM material (crops and trials) are handled and stored to minimise risk of contamination with conventional material.	Minor Must
CB . 2 . 5 . 5	Are GMO crops stored separately from other crops to avoid adventitious mixing?	Visual assessment must be made of genetically modified (GMO) crops storage for integrity and identification.	Major Must
CB . 3 .	**SITE HISTORY AND SITE MANAGEMENT**		
	Also see All Farm.2 (AF.2). Crop rotation is a basic strategy for control of pests, disease and weeds.		
CB . 3 . 1	**Rotations**		
CB . 3 . 1 . 1	Is there, where feasible, crop rotation for annual crops?	The rotations can be verified from planting date and/or plant protection product application records.	Recom.
CB . 4	**SOIL MANAGEMENT**		

N°	Control Point	Compliance Criteria	Level
	Soil is the basis of all agricultural production, and the conservation and improvement of this valuable resource is essential. Good soil husbandry ensures long-term fertility of soil, aids yield and profitability.		
CB . 4 . 1	**Soil Mapping**		
CB . 4 . 1 . 1	Have soil maps been prepared for the farm?	The type of soil is identified for each site, based on a soil profile or soil analysis or local (regional) cartographic soil-type map.	Recom.
CB . 4 . 2	**Cultivation**		
CB . 4 . 2 . 1	Have techniques been used that improve or maintain soil structure, and to avoid soil compaction?	Techniques applied are suitable for use on the land. There must be no evidence of soil compaction.	Recom.
CB . 4 . 3	**Soil Erosion**		
CB . 4 . 3 . 1	Are field cultivation techniques used to reduce the possibility of soil erosion?	There is visual evidence that there is no soil erosion or evidence of practices such as mulching and/or cross line techniques on slopes and/or drains and/or sowing grass or green fertilisers, trees and bushes on borders of sites, etc.	Minor Must
CB . 5	**FERTILISER USE**		
	The decision making process involves crop demands, the supply that is in the soil and available nutrients from farm manure and crop residues. Correct application to optimise use and storage procedures to avoid loss and contamination must be followed.		
CB . 5 . 1	**Nutrient Requirement**		
CB . 5 . 1 . 1	Is the application of all fertilisers and manure timed to maximise the efficacy and/or uptake by target crops?	Producer must demonstrate that consideration has been given to nutritional needs of the crop, soil fertility and residual nutrients on the farm and records must be available as evidence. No N/A	Minor Must
CB . 5 . 2	**Advice on Quantity and Type of Fertiliser**		
CB . 5 . 2 . 1	Are recommendations for application of fertilisers (organic or inorganic) given by competent, qualified advisers holding a recognised national certificate or similar? Do producers who use outside professional help (advisers and consultants) regarding the use of fertilisers satisfy themselves that the people on whom they rely are competent to provide that advice?	Where the fertiliser records show that the technically responsible person making the choice of the fertiliser (organic or inorganic) is an external adviser, training and technical competence must be demonstrated via official qualifications, specific training courses, etc., unless employed for that purpose by a competent organisation (i.e. fertiliser company).	Minor Must

N°	Control Point	Compliance Criteria	Level
CB . 5 . 2 . 2	Where such advisers are not used, are producers able to demonstrate their competence and knowledge?	Where the fertiliser records show that the technically responsible person determining quantity and type of fertiliser (organic or inorganic) is the producer, experience must be complemented by technical knowledge (e.g. product technical literature, specific training course attendance, etc.) or the use of tools (software, on farm detection methods, etc.).	Minor Must
CB . 5 . 3	**Records of Application**		
CB . 5 . 3 . 1	Have all applications of soil and foliar fertilisers, both organic and inorganic, been recorded including field, orchard or greenhouse reference?	Records are kept of all fertiliser applications, detailing the geographical area, the name or reference of the field, orchard or greenhouse where the registered product crop is located. Also applicable for hydroponic situations and where fertigation is used. No N/A. Refer to TE.4.3.1 for Tea certification.	Minor Must
CB . 5 . 3 . 2	Have all application dates of soil and foliar fertilisers, both organic and inorganic, been recorded?	Detailed in the records of all fertiliser applications are the exact dates (day/month/year) of the application. No N/A. Refer to TE.4.3.2 for Tea certification.	Minor Must
CB . 5 . 3 . 3	Have all applications of soil and foliar fertilisers, both organic and inorganic, been recorded including applied fertiliser types?	Detailed in the records of all fertiliser applications are the trade name, type of fertiliser (e.g. N, P, K) or concentrations (e.g. 17-17-17). No N/A.	Minor Must
CB . 5 . 3 . 4	Have all applied quantities of soil and foliar fertilisers, both organic and inorganic, been recorded?	Detailed in the records of all fertiliser application is the amount of product to be applied in weight or volume. The actual application made must be recorded as this is not necessarily the same as the recommendation . No N/A.	Minor Must
CB . 5 . 3 . 5	Have all applications of soil and foliar fertilisers, both organic and inorganic, been recorded including the method of application?	Detailed in the records of all fertiliser applications are the application machinery type used and the method (e.g. via the irrigation or mechanical distribution). No N/A.	Minor Must

N°	Control Point	Compliance Criteria	Level
CB . 5 . 3 . 6	Have all applications of soil and foliar fertilisers, both organic and inorganic, been recorded including the operator details?	Detailed in the records of all fertiliser applications is the name of the operator who has applied the fertiliser. If it is a one-man operation, (the producer) and the producer is the one doing the applications, it is acceptable to record the operator details only once No N/A. Refer to TE.4.3.3 for Tea certification.	Minor Must
CB . 5 . 4	**Application Machinery**		
CB . 5 . 4 . 1	Is fertiliser application machinery kept in good condition and verified annually to ensure accurate fertiliser application?	There are maintenance records (date and type of maintenance and calibration) or invoices of spare parts of both the organic and inorganic fertiliser application machinery available on request. There must, as a minimum, be documented records stating that the verification of calibration has been carried out by a specialised company, supplier of fertilization equipment or by the technically responsible person of the farm within the last 12 months.	Minor Must
CB . 5 . 5	**Fertiliser Storage**		
CB . 5 . 5 . 1	Is there an inorganic fertiliser stock inventory or record of use up to date and available on the farm?	A stock inventory which indicates the contents of the store (type and amount) is available and it is updated at least every 3 months.	Minor Must
CB . 5 . 5 . 2	Are inorganic fertilisers stored separately from plant protection products?	The minimum requirement is to prevent cross contamination between fertilisers and plant protection products by the use of a physical barrier. If fertilisers that are applied together with Plant Protection Products (i.e. micronutrients or foliar fertilisers) are packed in a sealed container it can be stored with plant protection products.	Minor Must
CB . 5 . 5 . 3	Are inorganic fertilisers stored in a covered area?	The covered area is suitable to protect all inorganic fertilisers, i.e. powders, granules or liquids, from atmospheric influences like sunlight, frost and rain. Based on risk assessment (fertiliser type, weather conditions, temporary storage), plastic coverage could be acceptable. Storage cannot be directly on the soil. It is allowed to store lime and gypsum in the field for a day or two before spreading.	Minor Must

N°	Control Point	Compliance Criteria	Level
CB . 5 . 5 . 4	Are inorganic fertilisers stored in a clean area?	Inorganic fertilisers, i.e. powders, granules or liquids, are stored in an area that is free from waste, does not constitute a breeding place for rodents, and where spillage and leakage is cleared away.	Minor Must
CB . 5 . 5 . 5	Are inorganic fertilisers stored in a dry area?	The storage area for all inorganic fertilisers, i.e. powders, granules or liquids, is well ventilated and free from rainwater or heavy condensation. No storage directly on the soil.	Minor Must
CB . 5 . 5 . 6	Are inorganic fertilisers stored in an appropriate manner, which reduces the risk of contamination of water courses?	All inorganic fertilisers, i.e. powders, granules or liquids are stored in a manner which poses minimum risk of contamination to water sources, i.e. liquid fertiliser stores must be surrounded by an impermeable barrier (according to national and local legislation, or to contain a capacity to 110% of the volume of the largest container if there is no applicable legislation), and consideration has been given to the proximity to water courses and flood risks, etc. Refer to CO.4.1.1 for Coffee and TE.4.4.1 for Tea certifications.	Minor Must
CB . 5 . 5 . 7	Are organic fertilisers stored in an appropriate manner, which reduces the risk of contamination of the environment?	Organic fertilisers, stored on the farm, must be stored in a designated area. Appropriate measures have been taken to prevent contamination of surfacewater (such as concrete foundation and walls, or specially built leak proof container, etc.) or must be stored at least 25 m from surface water bodies in particular. Refer to CO.4.1.2 for Coffee and TE.4.4.2 for Tea certifications.	Minor Must
CB . 5 . 5 . 8	Are inorganic and organic fertilisers stored separate from fresh produce/tea/coffee cherries?	Fertilisers cannot be stored with fresh produce/tea and/or harvested coffee cherries.	Major Must
CB . 5 . 6	**Organic Fertiliser**		
CB . 5 . 6 . 1	Has the use of human sewage sludge been banned on the farm?	No human sewage sludge is used on the farm. No N/A.	Major Must

N°	Control Point	Compliance Criteria	Level
CB . 5 . 6 . 2	Has a risk assessment been carried out for organic fertiliser which considers its source and characteristics, before application?	Documentary evidence is available to demonstrate that the following potential risks have been considered: disease transmission, weed seed content, method of composting, heavy metal content, etc. This also applies to substrates from bio-gas plants in which case reference must additionally be made to the legal requirements in the risk assessment.	Minor Must
CB . 5 . 6 . 3	Has account been taken of the nutrient contribution of organic fertiliser applications?	An analysis is carried out, which takes into account the contents of N·P·K nutrients in organic fertiliser applied.	Recom.
CB . 5 . 7	**Inorganic Fertiliser**		
CB . 5 . 7 . 1	Are purchased inorganic fertilisers accompanied by documentary evidence of nutrient content (N,P,K)?	Documentary evidence detailing N, P, K content, is available for all inorganic fertilisers used on crops grown under GLOBALGAP (EUREPGAP) within the last 12-month period.	Minor Must
CB 5 . 7 . 2	Are purchased inorganic fertilisers accompanied by documentary evidence of chemical content, which includes heavy metals?	Documentary evidence detailing chemical content, including heavy metals, is available for all inorganic fertilisers used on crops grown under GLOBALGAP (EUREPGAP) within the last 12-month period.	Recom.
CB . 6	**IRRIGATION/FERTIGATION**		
	Water is a scarce natural resource and irrigation should be triggered by appropriate forecasting and by technical equipment allowing for efficient use of irrigation water.		
CB . 6 . 1	**Predicting Irrigation Requirements**		
CB . 6 . 1 1	Have systematic methods of prediction been used to calculate the water requirement of the crop?	Calculations are available and are supported by data records e.g. rain gauges, drainage trays for substrate, evaporation meters, water tension meters (% of moisture in the soil) and soil maps.	Recom.
CB . 6 . 2	**Irrigation/Fertigation Method**		
CB . 6 . 2 . 1	Can the producer justify the method of irrigation used in light of water conservation?	The idea is to avoid wasting water. The irrigation system used is the most efficient available for the crop and accepted as such within good agricultural practice.	Minor Must

N°	Control Point	Compliance Criteria	Level
CB . 6 . 2 . 2	Is there a water management plan to optimise water usage and reduce waste?	A documented plan is available which outlines the steps and actions to be taken to implement the management plan. Refer to CO.5.1.1 for Coffee and TE.5.1.1 for Tea certifications.	Recom.
CB . 6 . 2 . 3	Are records of irrigation/fertigation water usage maintained?	Records are kept which indicate the date and volume per water meter or per irrigation unit. If the producer works with irrigation programmes, the calculated and actual irrigated water should be written down in the records. Refer to TE.5.1.2 for Tea certification.	Recom.
CB . 6 . 3	**Quality of Irrigation Water**		
CB . 6 . 3 . 1	Has the use of untreated sewage water for irrigation/fertigation been banned?	Untreated sewage water is not used for irrigation/fertigation. Where treated sewage water is used, water quality complies with the WHO published Guidelines for the Safe Use of Wastewater and Excreta in Agriculture and Aquaculture 1989. Also, when there is doubt if water is coming from a possibly polluted source (because of a village upstream, etc.) the grower has to demonstrate through analysis that the water complies with the WHO guideline requirements or the local legislation for irrigation water. See Table 3 in Annex AF.1 for Risk Assessments. No N/A.	Major Must
CB . 6 . 3 . 2	Has an annual risk assessment for irrigation/fertigation water pollution been completed?	The risk assessment must consider potential microbial, chemical or physical pollution of all sources of irrigation/fertigation water. Part of the risk assessment should consider the irrigation method and the crop, frequency of analysis, sources of water, the resources and susceptibility for pollutants and drain water of the sources and the environment.	Minor Must
CB . 6 . 3 . 3	Is irrigation water analysed at a frequency in line with the risk assessment (CB.6.3.2)?	The water analysis is carried out at a frequency according to the results of the risk assessment which takes the characteristics of the crop into account.	Minor Must
CB . 6 . 3 . 4	Is the analysis carried out by a suitable laboratory?	Results from appropriate laboratories, capable of performing microbiological analyses up to ISO 17025 level, or equivalent standard, should be available.	Recom.
CB . 6 . 3 . 5	Have any adverse results been acted upon?	Records are available of what actions have been taken and what the results are so far.	Recom.

N°	Control Point	Compliance Criteria	Level
CB . 6 . 4	**Supply of irrigation/fertigation water**		
CB . 6 . 4 . 1	To protect the environment, is water abstracted from a sustainable source?	Sustainable sources are sources that supply enough water under normal (average) conditions.	Minor Must
CB . 6 . 4 . 2	Has advice on abstraction been sought from water authorities, where required by law?	Where required by law, there must be written communication from the local water authority on this subject (letter, license, etc.).	Minor Must
CB . 7	**INTEGRATED PEST MANAGEMENT**		
	Integrated Pest Management (IPM) involves the careful consideration of all available pest control techniques and the subsequent integration of appropriate measures that discourage the development of pest populations, and keeps plant protection products and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment.		
CB . 7 . 1	Has assistance with implementation of IPM systems been obtained through training or advice?	The technically responsible person on the farm has received formal documented training and / or the external technical IPM consultant can demonstrate their technical qualifications.	Minor Must
CB . 7 . 2	Can the producer show evidence of implementation of at least one activity that falls in the category of "Prevention"?	The producer can show evidence of implementing at least one activity that includes the adoption of cultivation methods that could reduce the incidence and intensity of pest attacks, thereby reducing the need for intervention. See Annex CB.1 - GLOBALGAP (EUREPGAP) IPM Guidelines.	Minor Must
CB . 7 . 3	Can the producer show evidence of implementation of at least one activity that falls in the category of "Observation and Monitoring"?	The producer can show evidence of implementing at least one activity that will determine when, and to what extent, pests and their natural enemies are present, and using this information to plan what pest management techniques are required. See CB Annex 1 - GLOBALGAP (EUREPGAP) IPM Guidelines.	Minor Must
CB . 7 . 4	Can the producer show evidence of implementation of at least one activity that falls in the category of "Intervention"?	The producer show evidence that in situations where pest attack adversely affects the economic value of a crop, intervention with specific pest control methods will take place. Where possible, non-chemical approaches must be considered. See CB Annex 1 - GLOBALGAP (EUREPGAP) IPM Guidelines.	Minor Must

N°	Control Point	Compliance Criteria	Level
CB . 7 . 5	Where plant protection products have been used, has protection been achieved with the appropriate minimum input?	All plant protection product inputs are documented and include written justifications. No N/A.	Minor Must
CB . 7 . 6	Have anti-resistance label recommendations been followed to maintain the effectiveness of available plant protection products?	When the level of a pest, disease or weed requires repeated controls in the crops, there is evidence that anti-resistance recommendations (where legal and effective alternatives are available) are followed if specified by the product label.	Minor Must
CB . 8	**PLANT PROTECTION PRODUCTS**		
	In situations where pest attack will adversely affect the economic value of a crop, it may be necessary to intervene with specific pest control methods, including plant protection products (PPP). The correct use, handling and storage of plant protection products are essential.		
CB . 8 . 1	**Choice of Plant Protection Products**		
CB . 8 . 1 . 1	Is the plant protection product applied appropriate for the target as recommended on the product label?	All the plant protection products applied to the crop are suitable and can be justified (according to label recommendations or official registration body publication) for the pest, disease, weed or target of the plant protection product intervention. Technically valid (legal) "off label" uses that are supported by the PPP industry in writing is allowable. If the producer uses off-label PPP there must be evidence of official approval for use of that PPP on that crop in that country. No N/A	Major Must
CB . 8 . 1 . 2	Do producers only use plant protection products that are registered in the country of use for the target crop where such official registration scheme exists?	All the plant protection products applied are officially registered or permitted by the appropriate governmental organisation in the country of application. Where no official registration scheme exists, refer to the GLOBALGAP (EUREPGAP) guideline (Annex CB.2) on this subject and FAO International Code of Conduct on the Distribution and Use of Pesticides. Refer also to Annex CB.2 for cases where producer takes part in legal field trials for final approval of PPP by the local Government. No N/A. See exception (FO.6.1.1) for flower and ornamentals that are not intended for human and/or livestock consumption.	Major Must

N°	Control Point	Compliance Criteria	Level
CB . 8 . 1 . 3	Are invoices of registered plant protection products kept?	Invoices of the registered plant protection products used, must be kept for record keeping and available at the time of the external inspection. No N/A.	Minor Must
CB . 8 . 1 . 4	Is a current list kept of plant protection products that are used and approved for use on crops being grown?	An up to date documented list, that takes into account any changes in local and national plant protection product legislation is available for the commercial brand names of plant protection products (including their active ingredient composition, or beneficial organisms) that are used on crops being, or which have been, grown on the farm under GLOBALGAP (EUREPGAP) within the last 12 months. This is an internal management list, customised to the operation, not general information on approved products. No N/A.	Minor Must
CB . 8 . 1 . 5	Is there a process that prevents chemicals that are banned in the European Union from being used on crops destined for sale in the European Union?	The documented plant protection product application records confirm that no plant protection product that have been used within the last 12 months on the crops grown under GLOBALGAP (EUREPGAP) destined for sale within the E.U., has been prohibited by the E.U. (under EC Prohibition Directive List - 79/117/EC.)	Major Must
CB . 8 . 1 . 6	If the choice of plant protection products is made by advisers, can they demonstrate competence?	Where the plant protection product records show that the technically responsible person making the choice of the plant protection products is a qualified adviser, technical competence can be demonstrated via official qualifications or specific training course attendance certificates. Fax and e-mails from advisors, governments, etc. are allowable.	Major Must
CB . 8 . 1 . 7	If the choice of plant protection products is made by the producer, can competence and knowledge be demonstrated?	Where the plant protection product records show that the technically responsible person making the choice of plant protection products is the producer, experience must be complemented by technical knowledge that can be demonstrated via technical documentation, i.e. product technical literature, specific training course attendance, etc..	Major Must
CB . 8 . 2	**Records of Application**		
CB . 8 . 2 . 1	Have all the plant protection product applications been recorded including the crop name and/or variety?	All plant protection product application records specify the crop and/or variety treated. No N/A.	Major Must

N°	Control Point	Compliance Criteria	Level
CB . 8 . 2 . 2	Have all the plant protection product applications been recorded including the application location?	All plant protection product application records specify the geographical area, the name or reference of the farm, and the field, orchard or greenhouse where the crop is located. No N/A.	Major Must
CB . 8 . 2 . 3	Have all the plant protection product applications been recorded including application date?	All plant protection product application records specify the exact dates (day/month/year) of the application. Record the actual date (end date, if applied more than one day) of application. No N/A.	Major Must
CB . 8 . 2 . 4	Have all the plant protection product applications been recorded including the product trade name?	All plant protection product application records specify the trade name (inlcuding formulation) or beneficial organism. It must be possible to connect the trade name information to the active ingredient. No N/A.	Major Must
CB . 8 . 2 . 5	Has the operator been identified for plant protection product applications?	The operator applying plant protection products has been identified in the records. No N/A.	Minor Must
CB . 8 . 2 . 6	Have all the plant protection product applications been recorded including justification for application?	The common name of the pest(s), disease(s) or weed(s) treated is documented in all plant protection product application records. No N/A.	Minor Must
CB . 8 . 2 . 7	Have all the plant protection product applications been recorded including the technical authorisation for application?	The technically responsible person making the plant protection product recommendation has been identified in the records. No N/A.	Minor Must
CB . 8 . 2 . 8	Have all the plant protection product applications been recorded including appropriate information to identify the product quantity applied?	All plant protection product application records specify the amount of product to be applied in weight or volume, or the total quantity of water (or other carrier medium), and dosage in g/l or internationally recognised measures for the plant protection product. No N/A.	Minor Must
CB . 8 . 2 . 9	Have all the plant protection product applications been recorded including the application machinery used?	The application machinery type, for all the plant protection products applied (if there are various units, these are identified individually), and the method used (i.e. knapsack, high volume, U.L.V., via the irrigation system, dusting, fogger, aerial, or another method), are detailed in all plant protection product application records. No N/A.	Minor Must

N°	Control Point	Compliance Criteria	Level
CB . 8 . 2 . 10	Have all the plant protection product applications been recorded including the pre-harvest interval?	The pre-harvest interval has been recorded for all plant protection product applications. No N/A, unless Flower and Ornamental certification.	Major Must
CB . 8 . 3	**Pre-Harvest Interval (Not Applicable for Flower and Ornamentals)**		
CB . 8 . 3 . 1	Have the registered pre-harvest intervals been observed?	The producer can demonstrate that all pre-harvest intervals have been observed for plant protection products applied to the crops, through the use of clear documented procedures such as plant protection product application records and crop harvest dates from treated locations. Specifically in continuous harvesting situations, there are systems in place in the field, orchard or greenhouse, e.g. warning signs, time of application etc., to ensure compliance with all pre-harvest intervals. Refer to 8.6.4. No N/A, unless Flower and Ornamental production.	Major Must
CB . 8 . 4	**Application Equipment**		
CB . 8 . 4 . 1	Is plant protection product application machinery kept in good condition and verified annually to ensure acurate application?	The plant protection product application machinery is kept in a good state of repair with documented evidence of up to date maintenance sheets for all repairs, oil changes, etc. undertaken. See guideline (Annex CB.3) for compliance with visual inspection and functional tests of application equipment. The plant protection product application machinery (automatic and non-automatic) has been verified for correct operation within the last 12 months and this is certified or documented either by participation in an official scheme (where it exists) or by having been carried out by a person who can demonstrate their competence. No N/A.	Minor Must
CB . 8 . 4 . 2	Is the producer involved in an independent calibration-certification scheme, where available?	The producer's involvement in an independent calibration certification scheme is documented.	Recom.
CB . 8 . 4 . 3	When mixing plant protection products, are the correct handling and filling procedures, followed as stated on the label?	Facilities, including appropriate measuring equipment, must be adequate for mixing plant protection products, so that the correct handling and filling procedures, as stated on the label, can be followed. No N/A.	Minor Must

N°	Control Point	Compliance Criteria	Level
CB . 8 . 5	**Disposal of Surplus Application Mix**		
CB . 8 . 5 . 1	Is surplus application mix or tank washings disposed of according to national or local law, where it exists, or in its absence according to points CB.8.5.2 and CB.8.5.3, either of which in this case must be complied with in order to comply with this minor must?	Surplus mix or tank washings are disposed of according to the national or local legislation or, in its absence, according to points CB.8.5.2 and CB.8.5.3. No N/A.	Minor Must
CB . 8 . 5 . 2	Is surplus application mix or tank washings applied over an untreated part of the crop, as long as the recommended dose is not exceeded and records kept?	When surplus application mix or tank washings are applied over an untreated part of the crop, there is evidence that the recommended doses (as stated on the label) have not been exceeded and all the treatment have been recorded in the same manner and detail as a normal plant protection product application.	Recom.
CB . 8 . 5 . 3	Are surplus application mixes or tank washings applied onto designated fallow land, where legally allowed, and records kept?	When surplus application mix or tank washings are applied onto designated fallow land, it can be demonstrated that this is legal practice and all the treatments have been recorded in the same manner and detail as a normal plant protection product application, and avoiding risk of surface water contamination.	Recom.
CB . 8 . 6	**Plant Protection Product Residue Analysis** (N/A for Flower and Ornamental production)		
CB . 8 . 6 . 1	Are the correct sampling procedures followed?	Documentary evidence exists demonstrating compliance with applicable sampling procedures. Sampling can be carried out by the laboratory or by the grower providing the procedure is adhered to. (Reference can also be made to 2002/63/EC - Community methods of sampling for the official control of pesticide residues in and on products of plant and animal origin for more information on sampling.)	Minor Must
CB . 8 . 6 . 2	If the producer or producer's customer able to provide current evidence either of annual (or more frequent) residue testing or of participation in a third party plant protection product residue monitoring system, which is traceable to the production location and that covers the plant protection products applied to the crop/product?	Current documented evidence or records are available either of annual plant protection product residue analysis results for the GLOBALGAP (EUREPGAP) registered product crops, or of participation in a third party plant protection product residue monitoring system which is traceable to the farm. Refer to Annex CB.4. No N/A.	Major Must

N°	Control Point	Compliance Criteria	Level
CB . 8 . 6 . 3	Is the producer (or the producer's customer) able to demonstrate information regarding the market where the producer is intending to trade produce, and the Maximum Residue Level (MRL) of that market?	The producer or the producer's customer must have available a list of current applicable MRLs for the market(s) where produce is intended to be traded in (whether domestic or international). The MRLs will be identified by either demonstrating communication with clients confirming the intended market(s), or by selecting the specific country(ies) (or group of countries) where produce is intending to be traded in, and presenting evidence of compliance with a residue screening system that meets the current applicable country(ies') MRLs. Where a group of countries is targeted together for trading in, the residue screening system must meet the strictest current applicable MRLs in the group. Refer to Annex CB.4.	Major Must
CB . 8 . 6 . 4	Has action been taken to meet the MRLs of the market the producer is intending to trade his produce in?	Where the MRLs of the market the producer is intending to trade his produce in are stricter than those of the country of production, the producer or the producer's customer can demonstrate that during the production cycle these MRLs have been taken into account (i.e. modification where necessary of plant protection product application regime and/or use of produce residue testing results). Refer to Annex CB.4.	Major Must
CB . 8 . 6 . 5	Is an action plan in place in the event of an MRL being exceeded, either of the country of production or of the countries where produce is intended to be traded in?	There is a clear documented procedure of the remedial steps and actions, (this will include communication to customers, product tracking exercise, etc.) to be taken where a plant protection product residue analysis indicates an MRL (either of the country of production or of the countries where his harvested product is intended to be traded in if different) is exceeded.	Major Must

N°	Control Point	Compliance Criteria	Level
CB . 8 . 6 . 6	Is the laboratory used for residue testing accredited by a competent national authority to ISO 17025 or equivalent standard?	There is clear documented evidence either on the letter headings or copies of accreditations etc. that the laboratories used for plant protection product residue analysis have been accredited, or are in the process of accreditation to the applicable scope by a competent national authority to ISO 17025 or an equivalent standard. In all cases the laboratories must show evidence of participation in proficiency tests, e.g. FAPAS must be available. Refer to Annex CB.4.	Minor Must
CB . 8 . 7	**Plant Protection Product Storage**		
CB . 8 . 7 . 1	Are plant protection products stored in accordance with local regulations?	The plant protection product storage facilities comply with all the appropriate current national, regional and local legislation and regulations.	Major Must
CB . 8 . 7 . 2	Are plant protection products stored in a location that is sound?	The plant protection product storage facilities are built in a manner which is structurally sound and robust. No N/A.	Minor Must
CB . 8 . 7 . 3	Are plant protection products stored in a location that is secure?	The plant protection product storage facilities are kept secure under lock and key. No N/A.	Major Must
CB . 8 . 7 . 4	Are plant protection products stored in a location that is appropriate to the temperature conditions?	The plant protection product storage facilities are built of materials or located so as to protect against temperature extremes. No N/A.	Minor Must
CB . 8 . 7 . 5	Are plant protection products stored in a location that is fire-resistant?	The plant protection product storage facilities are built of materials that are fire resistant (Minimum requirement RF 30, i.e. 30 minutes resistance to fire). No N/A.	Minor Must
CB . 8 . 7 . 6	Are plant protection products stored in a location that is well ventilated (in the case of walk-in storage)?	The plant protection product storage facilities have sufficient and constant ventilation of fresh air to avoid a build up of harmful vapours. No N/A.	Minor Must

N°	Control Point	Compliance Criteria	Level
CB . 8 . 7 . 7	Are plant protection products stored in a location that is well lit?	The plant protection product storage facilities have or are located in areas with sufficient illumination both by natural and by artificial lighting, to ensure that all product labels can be read easily on the shelves. No N/A.	Minor Must
CB . 8 . 7 . 8	Are plant protection products stored in a location that is located away from other materials?	The plant protection product storage facilities are located in a separate air space independent from any other materials. Refer to CB.5.5.2. No N/A.	Minor Must
CB . 8 . 7 . 9	Is all plant protection product storage shelving made of non-absorbent material?	The plant protection product storage facilities are equipped with shelving which is not absorbent in case of spillage, e.g. metal, rigid plastic.	Recom.
CB . 8 . 7 . 10	Is the plant protection product store able to retain spillage?	The plant protection product storage facilities have retaining tanks or are bunded according to 110% of the volume of the largest container of stored liquid, to ensure that there cannot be any leakage, seepage or contamination to the exterior of the store. No N/A.	Minor Must
CB . 8 . 7 . 11	Are there facilities for measuring and mixing plant protection products?	The plant protection product storage facilities or the plant protection product filling/mixing area if this is different, have measuring equipment whose graduation for containers and calibration verification for scales has been verified annually by the producer to assure accuracy of mixtures and are equipped with utensils, e.g. buckets, water supply point etc. for the safe and efficient handling of all plant protection products which can be applied. No N/A.	Minor Must
CB . 8 . 7 . 12	Are there facilities to deal with spillage?	The plant protection product storage facilities and all designated fixed filling/mixing areas are equipped with a container of absorbent inert material such as sand, floor brush and dustpan and plastic bags, that must be signposted and in a fixed location, to be used in case of spillage of plant protection product. No N/A.	Minor Must
CB . 8 . 7 . 13	Are keys and access to the plant protection product store limited to workers with formal training in the handling of plant protection products?	The plant protection product storage facilities are kept locked and physical access is only granted in the presence of persons who can demonstrate formal training in the safe handling and use of plant protection products. No N/A.	Minor Must

N°	Control Point	Compliance Criteria	Level
CB . 8 . 7 . 14	Is the product inventory documented and readily available?	A stock inventory which indicates the contents (type and quantity) of the store is available and it is updated at least every 3 months. Quantity refers to how many bags, bottles, etc., not on milligram or centiliter basis.	Minor Must
CB . 8 . 7 . 15	Are all plant protection products stored in their original package?	All the plant protection products that are currently in the store are kept in the original containers and packs, in the case of breakage only, the new package must contain all the information of the original label. Refer to CB.8.9.1. No N/A.	Major Must
CB . 8 . 7 . 16	Are those plant protection products that are approved for use on the crops grown in the crop rotation stored separately within the plant protection product store from those plant protection products used for other purposes?	All the plant protection products currently kept in the plant protection product store or which are indicated on the stock rotation records are officially approved and registered (point CB.8.1.3) for application on the crops within the crop rotation program. Plant protection products used for purposes other than application on crops within the rotation are clearly identified and stored separately within the GLOBALGAP (EUREPGAP) plant protection products store.	Minor Must
CB . 8 . 7 . 17	Are liquids not stored on shelves above powders?	All the plant protection products that are liquid formulations are stored on shelving which is never above those products that are powder or granular formulations. No N/A.	Minor Must
CB . 8 . 8	**Plant Protection Product Handling**		
CB . 8 . 8 . 1	Are all workers who have contact with plant protection products submitted voluntarily to annual health checks?	All workers who are in contact with plant protection products are voluntarily submitted to health checks annually. These Health checks must comply with national, regional or local codes of practice and use of results respect the legality of disclosure of personal data.	Recom.
CB . 8 . 8 . 2	Are there procedures dealing with re-entry times on the farm?	There are clear documented procedures which regulate all the re-entry intervals for plant protection products applied to the crops according to the label instructions. Where no re-entry information is available on the label, there are no specific requirements.	Major Must
CB . 8 . 8 . 3	Have the recommended re-entry times been monitored?	Documentation (e.g. plant protection products application records) demonstrate that all re-entry intervals for plant protection products applied to the crops have been monitored.	Minor Must

N°	Control Point	Compliance Criteria	Level
CB . 8 . 8 . 4	Is the accident procedure evident within 10 meters of the plant protection product/ chemical storage facilities?	An accident procedure containing all information detailed in AF.3.3.1 must visually display the basic steps of primary accident care and be accessible by all persons within 10 meters of the plant protection product/ chemical storage facilities and designated mixing areas. No N/A	Minor Must
CB . 8 . 8 . 5	Are there facilities to deal with accidental operator contamination?	All plant protection product / chemical storage facilities and all filling/mixing areas present on the farm have eye wash capability, a source of clean water no more than 10 meters distant, a complete first aid kit and a clear accident procedure with emergency contact telephone numbers or basic steps of primary accident care, all permanently and clearly signed. No N/A.	Minor Must
CB . 8 . 9	**Empty Plant Protection Product Containers**		
CB . 8 . 9 . 1	Is re-use of empty plant protection product containers for purposes other than containing and transporting of the identical product avoided?	There is evidence that empty plant protection product containers have not been or currently are not being re-used for anything other than containing and transporting of the identical product as stated on the original label. No N/A.	Minor Must
CB . 8 . 9 . 2	Does disposal of empty plant protection product containers occur in a manner that avoids exposure to humans?	The system used to dispose of empty plant protection product containers ensures that persons cannot come into physical contact with the empty containers by having a secure storage point, safe handling system prior to the disposal and a disposal method that avoids exposure to persons. No N/A.	Minor Must
CB . 8 . 9 . 3	Does disposal of empty plant protection product containers occur in a manner that avoids contamination of the environment?	The system of disposal of empty plant protection product containers minimises the risk of contamination of the environment, watercourses and flora and fauna, by having a safe storage point and a handling system prior to disposal by an environmentally responsible method. No N/A.	Minor Must
CB . 8 . 9 . 4	Are official collection and disposal systems used when available?	Where official collection and disposal systems exist, there are documented records of participation by the producer.	Minor Must

N°	Control Point	Compliance Criteria	Level
CB . 8 . 9 . 5	If there is a collection system, are the empty containers adequately stored, labelled and handled according to the rules of a collection system?	All the empty plant protection product containers, once emptied, are not reused, and have been adequately stored, labelled and handled, according to the requirements of official collection and disposal schemes where applicable.	Minor Must
CB . 8 . 9 . 6	Are empty containers rinsed either via the use of an integrated pressure-rinsing device on the application equipment, or at least three times with water?	Installed on the plant protection product application machinery there is pressure-rinsing equipment for plant protection product containers or there are clear written instructions to rinse each container 3 times prior to its disposal. No N/A.	Major Must
CB . 8 . 9 . 7	Is the rinsate from empty containers returned to the application equipment tank?	Either via the use of a container-handling device or via written procedure for the application equipment operators, the rinsate from the empty plant protection product containers is always put back into the application equipment tank when mixing.	Minor Must
CB . 8 . 9 . 8	Are empty containers kept secure until disposal is possible?	There is a designated secure store point for all empty plant protection product containers prior to disposal that is isolated from the crop and packaging materials i.e. permanently signed and with physically restricted access for persons and fauna.	Minor Must
CB . 8 . 9 . 9	Are all local regulations regarding disposal or destruction of containers observed?	All the relevant national, regional and local regulations and legislation if it exists, has been complied with regarding the disposal of empty plant protection product containers.	Major Must
CB . 8 . 10	**Obsolete plant protection products**		
CB . 8 . 10 . 1	Are obsolete plant protection products securely maintained and identified and disposed of by authorised or approved channels?	There are documented records that indicate that obsolete plant protection products have been disposed of by officially authorised channels. When this is not possible, obsolete plant protection products are securely maintained and identifiable.	Minor Must

ANNEX CB.1: INTEGRATED PEST MANAGEMENT

INTRODUCTION AND DEFINITION

Integrated Pest Management (IPM) involves the careful consideration of all available pest control techniques and the subsequent integration of appropriate measures that discourage the development of pest populations[1], and keeps plant protection products and other interventions to levels that are economically justified and reduce or minimize risks to human health and the environment. IPM emphasizes the growth of healthy crops with the least possible disruption of agro-ecosystems and encourages natural pest control mechanisms.

GLOBALGAP (EUREPGAP) sees IPM as an important strategic discipline contributing to food quality, food safety, farmers' and workers' health, and quality of the environment. IPM requires a planned approach to crop protection, including a variety of methods, and tools, to manage pests effectively according to local conditions. In order to help farmers and certification bodies alike, GLOBALGAP (EUREPGAP) has defined in the guidelines below, those activities which will be regarded as making a genuine contribution to IPM. These guidelines are applicable in general terms to all crops, but local differences between crop type and production methods will mean that the IPM techniques listed are not fully prescriptive of all IPM methods. There may therefore be some need for local interpretation of the guidelines and the future inclusion in these guidelines of additional methods that are compatible with IPM approaches.

IPM TECHNIQUES

IPM techniques have (for the purpose of these guidelines and the GLOBALGAP (EUREPGAP) standards) been divided into three broad categories:

1. Prevention – the adoption of cultivation methods that could reduce the incidence and intensity of pest attacks, thereby reducing the need for intervention

2. Observation and Monitoring – determining when, and to what extent, pests and their natural enemies are present, and using this information to plan what pest management techniques are required

3. Intervention – in situations where pest attack will adversely affect the economic value of a crop, it may be necessary to intervene with specific pest control methods, including plant protection products. However, where possible, non-chemical approaches should be considered.

1. Prevention:

Crop rotation, pest exclusion and soil management: includes a range of techniques for reducing the build-up of pests, such as: appropriate crop rotation to minimise pest incidence; appropriate site selection and use of physical or biological barriers to avoid pest incidence; improving soil structure; increasing organic matter content; using mulches; sterilising soil and substrate by thermal (rather than chemical) techniques (e.g. steam, solarisation).

Selection of appropriate plant varieties and planting material: including the use of pest-resistant or pest-tolerant plant varieties, where available and commercially- acceptable; purchasing healthy (e.g. certified disease-free) planting material from a reputable supplier.

Good crop hygiene: includes the removal of infected or diseased plants and crop debris; controlling non-crop weeds that serve as hosts for crop pests; cleaning and disinfection of machinery and equipment.

2. Observation and Monitoring:

Crop monitoring: includes routine and regular inspection of pest incidence in crops; identification and inspection of the presence of natural enemies of pests; the use of pheromone and other relevant trapping systems for pest monitoring.

Using decision-support systems as a means to identify the need for, and/or timing, of intervention strategies: use data on the economic threshold levels of pest incidence as a basis for decision-making; time intervention applications on the basis of informed technical guidance; use data on temperature, humidity, rainfall, hail, frost etc, to guide the potential need for intervention.

3. Intervention

Approved plant protection products can be highly effective in pest management and may be essential in some situations e.g. for controlling quarantine pests on crops for export. However, where possible, every consideration should be given to the following range of intervention strategies:

Use plant protection products selectively and in ways that reduce the risk of resistance developing : including the use of approved selective plant protection products which have reduced adverse impact on non-target species (e.g. insect growth regulators, insecticidal soaps, mineral and vegetable oils, plant extracts); use plant protective products in a selective manner (e.g. seed treatment; spot treatments in situations where the pest is located in 'hot spots', rather than distributed throughout the crop); use bait treatments where appropriate; systematically alternate plant protection products from different chemical groups for effective resistance management. If quarantine pest species require control, to satisfy the regulations of an importing country, approved plant protection products can be applied, but a combination of other measures (e.g. pest-free or low pest prevalence areas; post-harvest commodity treatments) integrated to provide equivalent control should also be pursued.

Use natural enemies and other commercially-available biological methods of control : including managing the cropping environment to enhance the levels of natural enemies (e.g. by providing favourable habitats); where appropriate, introduce predators and parasites for insect pest control (e.g. in greenhouse crops or in fields where cover spraying of plant protection products is not used); use appropriate commercially-available selective microbial control agents (e.g. *Bacillus thuringiensis,* insect-parasitic nematodes, insect-specific fungal and viral products); consider the use of other selective control methods, (e.g. mating disruption with pheromones, sterile insect technique).

Use other methods to control pests: including mechanical methods, i.e.controlling weeds by mowing and/or mechanical cultivation; use of traps for insect pest control, etc..

[1] In this document, the word "Pest" is used for all pests, diseases and weeds encountered in crop production.

PRODUCER REQUIREMENTS

Growers are required to demonstrate to their certification body that they have implemented at least one activity that appears in each of the three main topic areas (i.e. one within each of the 'Prevention', 'Observation and Monitoring', and 'Intervention' categories).

ANNEX CB.2 GLOBALGAP (EUREPGAP) GUIDELINE | PLANT PROTECTION PRODUCT USE IN COUNTRIES THAT ALLOW EXTRAPOLATION

	Registration Scheme in Country of Use	Safe Use Criteria in this Situation (Operator and Environment)	Authorisation of Plant Protection Products for Use on Individual Crops
A	NO REGISTRATION SCHEME EXISTS Some control over PPP imports may be in place	PPPs that are used must have clear guidance for the user to allow for the safe use of the product in line with the "International Code of Conduct on the Distribution and use of Pesticides" (FAO Rome 2002).	Extrapolated Uses are permitted
B	A REGISTRATION SCHEME EXISTS Imported PPPs are permitted for sale with the label of the country of origin. This may be in addition to national labels for the PPPs	The user of the PPP which is a direct import must be provided with clear guidance to allow for the safe use of the product. This guidance could be in the form of label translations or notes provided by the distributor.	1.The imported PPP carries a label which matches the national approval.
			2. The imported PPP carries a label which is different to the current national approval. In this case this PPP can be used on the crop where the national approval is valid.
			3. The crop is not covered on the national label. Extrapolated uses are permitted, if the national scheme does not exclude this practice.

EXCEPTION:

Where field trials are performed by producers in cooperation with the government as the final trials before approval of plant protection products(PPP), the producer can still receive GLOBALGAP (EUREPGAP) certification, even though part of the product will be destroyed or used for further analyses. There must be clear traceability and information on the area (size) used for the trials. The producer must also have available meaningful documents indicating that the producer is taking part in a legal field trial in full conformity with the legislation of the country of production. Furthermore, clear procedures must exist on the management of these trials. The PPPs that are being trialed are not allowed for use on the product to be certified and the residue testing must not show residues of this product.

ANNEX CB.3 GLOBALGAP (EUREPGAP) GUIDELINE | GUIDELINE FOR VISUAL INSPECTION AND FUNCTIONAL TESTS OF APPLICATION EQUIPMENT

1. There shall be no leakages from the pump, spray liquid tank (when the cover is closed), pipes, hoses and filters.

2. All devices for measuring, switching on and off, adjusting pressure and/or flowrate shall work reliably and there shall be no leakages.

3. The nozzle equipment shall be suitable for appropriate application of the plant protection products. All nozzles shall be identical (type, size, material and origin), form a uniform spray jet (e.g. uniform shape, homogeneous spray) and there shall be no dripping after switching off the nozzles.

4. All the different parts of the equipment (sprayer), e.g. nozzle holder/carrier, filters, blower, etc. shall be in good condition and work reliably.

Source: Base document: DIN EN 13790-1:2004. Agricultural machinery - Sprayers; Inspection of sprayers in use - Part 1: Field crop sprayers

ANNEX CB.4 GLOBALGAP (EUREPGAP) INTERPRETATION GUIDELINE | CB.8.6 - RESIDUE ANALYSIS

CONTROL POINT	INTERPRETATION
CB.8.6.2	1. If there is a residue monitoring system, based on risk analysis, which takes into account PPPs applied to the crops, this point will be covered. If the farm is not a member of a third party monitoring system, there must be evidence of a risk analysis on farm.
CB.8.6.3	1. In all cases evidence of the list of the current applicable MRLs for the country(ies)/region (even if it is the country of production itself) where produce is intended to be traded in must be available, or any other documentation that shows that the producer (or his direct customer) has incorporated this information.
	2. Where communication with clients is presented by the producer it can be in the form of letters or other verifiable evidence. These can be present or future clients.
	3. As an alternative to 2., where for example the producer does not yet know with whom trading will take place, the producer can participate in a residue screening system that meets the strictest MRLs (or import tolerances if they exist and are different) in the country or region where produce is intended to be traded in. Where there is a harmonised MRL for that region, it must be conformed with. If the producer sells product on the market of the country of production, the current applicable (national) MRL list must still be available as in 1. above.
	4. Internal segregation and traceability of certified produce is needed if trying to meet MRLs of different markets for different batches of produce (i.e. simultaneous production for US, EU, Country of Production), although EU legislation must be complied with at all times for entire crop.
	5. This control point must be cross referenced with the information given at registration of the producer and any updates sent to the CB since registration, i.e. to verify if the producer sells his product exclusively on the market of the country of production and he declares this at registration.
	6. Information re MRLs at: http ://www. globalgap. org/documents/webdocs/GLOBALGAP_GL-INFOSOURCES_FP_V1-3Aug04.doc or latest version
CB.8.6.4	1.Guidance must be sought from PPP industries/Grower Organisations or technically responsible advisors on how to adapt production methods (e.g to increase Pre-harvest interval) that are necessary to take the stricter MRLs into account.
	2. If the producer sells his product exclusively on the national market of the country of production and he declares this at registration, this control point is considered complied with (since legislation on GAP such as Pre-harvest interval, dosage, etc. in the country of production covers this point already).
	3. If the producer is producing within an EU country and the MRLs of the market he is intending to trade in are those of another EU country, then he must firstly comply with harmonised MRLs set by the EU, and secondly with the MRLs of the member country he is intending to trade in. The producer may, in compliance of the latter, be exempted from compliance of certain end-market MRLs if national (country of production) MRLs have been officially recognised by the government of the end market country, and the producer holds evidence of this agreement. (i.e. German Government officially recognises approx 20 a.i. Spanish national MRLs as legally acceptable for specific products sold from Spain, even though they are higher than the national German MRLs.)
	4. This control point must be cross referenced with the information given at registration of the producer and any updates sent since registration.
CB.8.6.6	1. Proficiency testing is part of ISO 17025 accreditation – so no additional costs to accredited labs. It is, however, important for the labs that are in the process of accreditation to ISO 17025 or labs accredited to an equivalent standard (e.g. GLP) to prove participation in proficiency testing.
	2. This will ensure accurate analyses.

EDITION UPDATE REGISTER

Control Points and Compliance Criteria Version	Replaces	Replaced document obsolete	New document comes into force	Description of Modifications
3.0-1_2July07	3.0-Mar07	2. July 07	2. July 07	Clarification of wording for Compliance Criteria: 4.2.1; 8.7.8; 8.9.7
3.0-2_Sep07	3.0-1_2July07	30-Sep-07	30-Sep-07	Modification GLOBALGAP (EUREPGAP), Clarification of wording for Compliance Criteria: 2
3.0-3_Feb09	3.0-2_Sep07	15-Feb-09	16-Feb-09	Clarification of wording for Compliance Criteria:8.1.2 (implication for FO certification only)

1. For detailed information of the modifications please contact GLOBALGAP Secretariat for the History document.
2. When the changes do not affect the accreditation of the standard, the version will remain "3.0" and edition update shall be indicated with "-x".
3. When the changes do affect the accreditation of the standard, the version name will change to "3.x".

1 Record Keeping and Internal Self- Assessment/Internal Inspection (AF1)

Maturity Level	Grower Generic Practices	Results
Level 1 (Initial)	N/A	
Level 2 (Repeated)	Grower has kept invoice, delivery note, income statement	
Level 3 (Defined)	Evaluate performance benchmarked with other producer or producer group regularly	
Level 4 (Managed)	Corrective action have implemented and recorded	
Level 5 (Optimization)	Preventive actions have written implemented and exposed	

2 SITE HISTORY AND SITE MANAGEMENT

Maturity Level	Grower Generic Practices	Results
Level 1 (Initial)	N/A	
Level 2 (Repeated)	Do crop rotation and/or use to have soil analysis	
Level 3 (Defined)	Record has been updated regularly and sufficient details such as planting date and/or plant protection product application. Soil has been analysis and managed such as crop rotation, draining, mulching, trees or bush border.	
Level 4 (Managed)	Have farm location or mapping. Have risk assessment on new crop. Crop rotation and no soil compaction activities. The activities have been recorded included on name of operator, date, active ingredient, dosage and treatment method.	
Level 5 (Optimization)	Have strategic for soil management. Soil testing regularly. Use innovation help to improve soil quality and not polluted to environment. Have written evident for all activities	

3 WORKERS HEALTH, SAFETY AND WELFARE

Maturity Level	Grower Generic Practices	Results
Level 1 (Initial)	Working without safety and understanding	
Level 2 (Repeated)	Ware protective clothing to protect from direct contact with chemical very time of applied chemical and wash separately after used protective clothing from private clothing.	
Level 3 (Defined)	Have record about worker who operate task and worker must be trained. Have hygiene instruction display in place. All workers must be trained on hygiene and have first aid kits to be available at site. Protective clothing are use and in good conditions. Have the facilities, rest area or shelter for workers during rest period.	
Level 4 (Managed)	Have the person who has trained about first aid, Have risk assessment regularly on health, safety and hygiene. Emergency contact medical service is available at the farm, Have record for the worker who has work at the farm and period of working.	
Level 5 (Optimization)	Have open discussion about health, safety and welfare with worker and keep records. For subcontractor, must follow the rule or working compliant with Global GAP requirement	

4 WASTE AND POLLUTION MANAGEMENT, RECYCLING AND RE-USE (AF4)

Maturity Level	Grower Generic Practices	Results
Level 1 (Initial)	N/A	
Level 2 (Repeated)	collected empty container and waste in certain area wait for eliminate	
Level 3 (Defined)	Manage all waste in the farm by separate material of empty container. The storages are cleaned and do not litter chemical or waste on the ground.	
Level 4 (Managed)	Identify and store different type of waste separately. Have plan on wastage reduction, pollution, and waste recycling. Have plan to use biodiversity on the farm	
Level 5 (Optimization)	Plan for reduction of waste pollution are implemented. Environmental impacted has been considered.	

5 COMPLAINTS (AF6)

Maturity Level	Grower Generic Practices	Results
Level 1 (Initial)	N/A	
Level 2 (Repeated)	Accept the claim or complain from customer without evidence	
Level 3 (Defined)	Accept the claim or complain from customer but can not solve problem	
Level 4 (Managed)	Have the complain document and action plan and solving problem systematically	
Level 5 (Optimization)	The complain and problem, solutions have been improved to prevent reoccurred situation	

6 TRACEABILITY (AF7, CB1)

Maturity Level	Grower Generic Practices	Results
Level 1 (Initial)	N/A	
Level 2 (Repeated)	Have record on delivery date and details about their products such as sales invoice or delivery noted	
Level 3 (Defined)	Have record and complied with traceability system. Which the producer can trace back to the raw material and process that has been used in the crop and also able to trace forward to the customer	
Level 4 (Managed)	Have fully traceability, product recall or withdraw procedure. The procedure must be tested annually	
Level 5 (Optimization)	The result of product recall or withdraw have been discuss for improvement and prevent of accident situation occurred	

7 PROPAGATION MATERIAL

Maturity Level	Grower Generic Practices	Results
Level 1 (Initial)	Do their crop as they use to not serious check on propagation material	
Level 2 (Repeated)	Using reliable source of propagation material.	
Level 3 (Defined)	Using propagation materials that have been tested for resistance on pets and diseases. Have record of propagation material (sowing planting, method, rate and date), and any sign during growing period.	
Level 4 (Managed)	Using propagation material that complied to the national registration and have record available for any treatment on propagation material	
Level 5 (Optimization)	Have registered the farm and have good system to prevent product contamination with conventional products, in case of growing GMO plant.	

8 FERTILISER USE (CB5)

Maturity Level	Grower Generic Practices	Results
Level 1 (Initial)	Use fertilizer as they been used or advice from others to used without consider on necessity	
Level 2 (Repeated)	Have attended the training or seminar about fertilizers. Understand about fertilizers	
Level 3 (Defined)	Have record about fertilizer application in the farm. The record must indicated date of apply, trade mane, type of fertilizer, amount that has been applied, Method or applied, operator name, balancing at storage, storage area is safety from contamination.	
Level 4 (Managed)	The growers have record about their soil nutrient and fertility. The worker have been trained and have knowledge about fertilizer	
Level 5 (Optimization)	Organic fertilizer have applied and been analysis for nutrients	

9 IRRIGATION/FERTIGATION (CB6, FV3)

Maturity Level	Grower Generic Practices	Results
Level 1 (Initial)	N/A	
Level 2 (Repeated)	water quality check by own vision (Eye judgment)	
Level 3 (Defined)	Not use untreated sewage water in irrigation and fertigation	
	Analysis risk of microbial contamination, and polluted to the environment. Have corrective action and decision taken plan.	
Level 4 (Managed)	Sourcing secure sufficient water during growing crop. Resource of water must be obey the law	
Level 5 (Optimization)	Water consumption has been calculated and have recorded on water supplied to the crop. Water quality has been test by the lab which has standards.	

10 INTEGRATED PEST MANAGEMENT (CB7)

Maturity Level	Grower Generic Practices	Results
Level 1 (Initial)	N/A	
Level 2 (Repeated)	Using chemicals from advise of chemical store or other sources	
Level 3 (Defined)	The technical worker on farm has been trained about IPM, The grower have knowledge about reduce intensity of pets attacks and able to identify the situation of enemies pets coming in to the farms and able to manage. All plant protections that applied to the farm have been record	
Level 4 (Managed)	The grower has considered on using non chemical when pest attack When applied the chemical, the growers have consider on resistance and applied chemical follow the recommendation as indicated at label	
Level 5 (Optimization)	The grower have use other technic to control enemy pest like close system, baits, or biological technic	

11 PLANT PROTECTION PRODUCTS

Maturity Level	Grower Generic Practices	Results
Level 1 (Initial)	N/A	
Level 2 (Repeated)	The grower may use any kind of chemical without considered on legal, and may not follow label instructions.	
Level 3 (Defined)	Applied suitable plant protection products for pest, disease, and weed. The plant protections have applied follow instruction. Those products must be registered. The plant protections chemical must be follow or complied with the regulation of importing country. The growers have been trained by qualify advisor. It could be by government, university, etc.	
	The growers have fully record about plant protection such as crop location, date of applied, trade name, pets, disease, or weed name.	
	The grower have document record on plant production product that have been applied in the farm and give the period before harvest according to the label indicated	
	The equipment in plant protection has been maintenance appropriately and ready to be used	
	The farmer or buyers have test the product for residual and able to trace back to the farm.	
	Plant protection products have been kept and stored properly and secured. The container must have original label attached.	
	The grower do not reused empty container and disposal appropriated	

Level 4 (Managed)	Document of plant protection have kept and available for trace back. Have the list of plant protection that has been used in the farm available	
	Plant protection products which have bee applied have been record on person in charge, reason of using, volume, method applied,	
	The machines of plant protection application have been record for maintenance and repaired	
	Have eliminate surplus plant protection products by spray with the plant that have not been sprayed or applied	
	The grower or buyer able to identify the Maximum Residual (MRL) of the importing country. The grower or buyer also able to manage when found the chemical over residual appropriately. The analysis for MRL has been analysis by the laboratory which have certified standard ISO17025	
	Plant Protection Products have storage appropriately and secured, suitable conditions. Able to protect it from fire, air circulation, have all supporting equipment available and have record.	
	The grower have procedures for regulate re-entry interval has been applied according to the label indicated. The accident care area is near operator area and has emergency contact information.	
	Empty container have been clean and disposal according to the regulation. Cleaning water have been treated not contaminate to the environment.	
	Obsolete plant protection has been disposed by official authorised	
Level 5 (Optimization)	The surplus plant protections have been treated appropriately and record same as treated in the crop. The workers have medical check annually. Have instruction to clean empty container with pressure water for 3 times for disposal	

12 HARVESTING (general, latest step of packaging) **(FV4)**

Maturity Level	Grower Generic Practices	Results
Level 1 (Initial)	N/A	
Level 2 (Repeated)	Harvest product as they have been doing and not consider on improve product condition	
Level 3 (Defined)	The growers have been trained about product and personal hygiene. Hygiene equipment and tools are in place and ready to be used. Product have been remove from the file and store with protection to prevent contamination	
Level 4 (Managed	Have risk assessment analysis, Product have stored according to the product requirement conditions	
Level 5 (Optimization)	Have applied technology for harvesting, packing and storage	

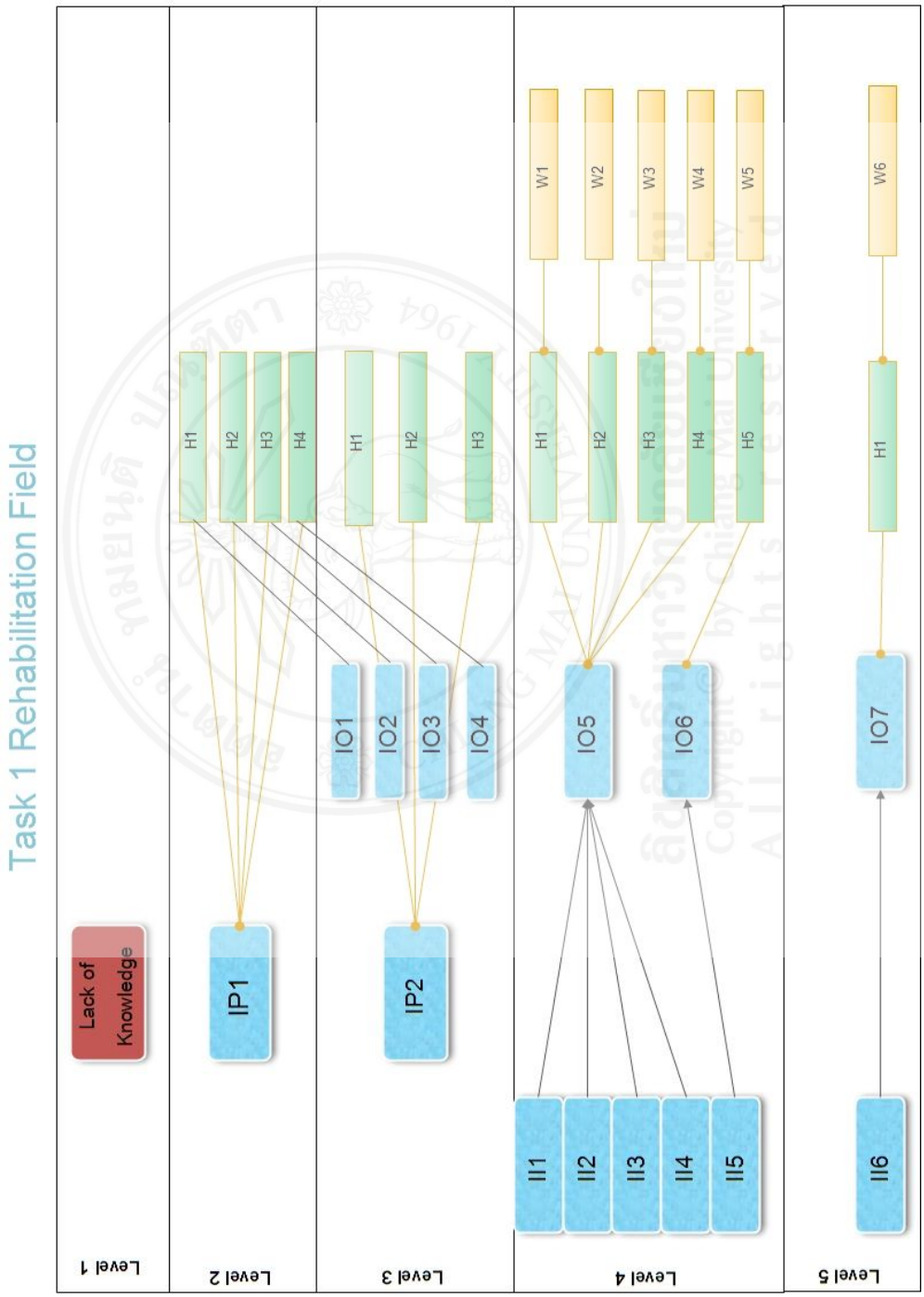
13 PRODUCTION MANAGEMENT (FV5)

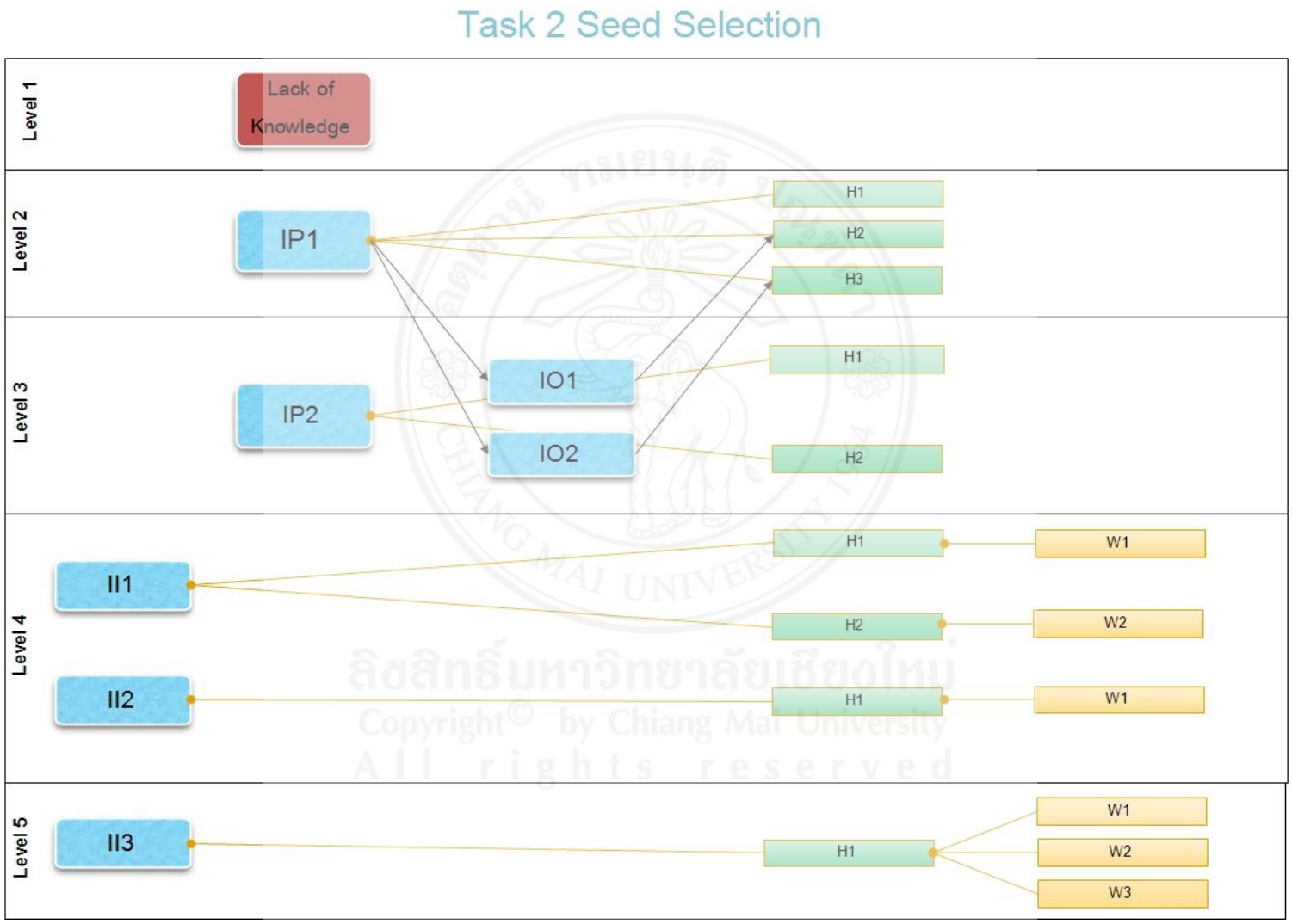
Maturity Level	Grower Generic Practices	Results
Level 1 (Initial)	N/A	
Level 2 (Repeated)	The producer have preselected and wash the product before delivery	
Level 3 (Defined)	Have done product hygiene, risk, analysis and assessment	
	Workers have been train on personal, product hygiene and production flow have been managed to avoid risk of contamination.	
	Storage the product in suitable and good condition for the products suitable condition for temperature and moisture	
	Using clean water to wash the product. Water quality is suitable to apply with direct contact with the product and has been analysed to comply with the standard. In case of recirculate water must be clean filter and manage PH and prevent infected	
	The grower will use only biocide and wax that have been register with official registrations and use according to the label. The chemical is allowed to use by importing country. The technician or worker have been train and certified. Treatment or chemical applied have recorded included date of applied, treatment method, trade name, amount, and consider on control points.	

Level 4 (Managed)	The grower or workers have awareness on hygiene and prevent of contamination. The storage facilities are cleaned and prevent contamination.	
	The worker using cleaning agent and lubricant ask label indication and kept at designate area to prevent contamination with produce	
	Rejected and waste material are kept in specific are separate from produce	
	Glass and clear hard plastic breakage has been managed properly to avoid contamination with produce	
	Do not let animal come in to the process area	
	The produces are packed according to the standard and agreement. The equipment and have been calibrated regularly	
	The grower have visual assessment for pest and have pest control have been applied in the process area	
	The chemicals (Biocide, wax and plant protections) has been update regularly	
	The name of operator, common name of pest, disease are recorded	
Level 5 (Optimization)	The worker ware outer garment to protect from contamination and safety. The stocks are rotated to have maximum product quality and safety. Water has been analysis by reliable and certified laboratory.	

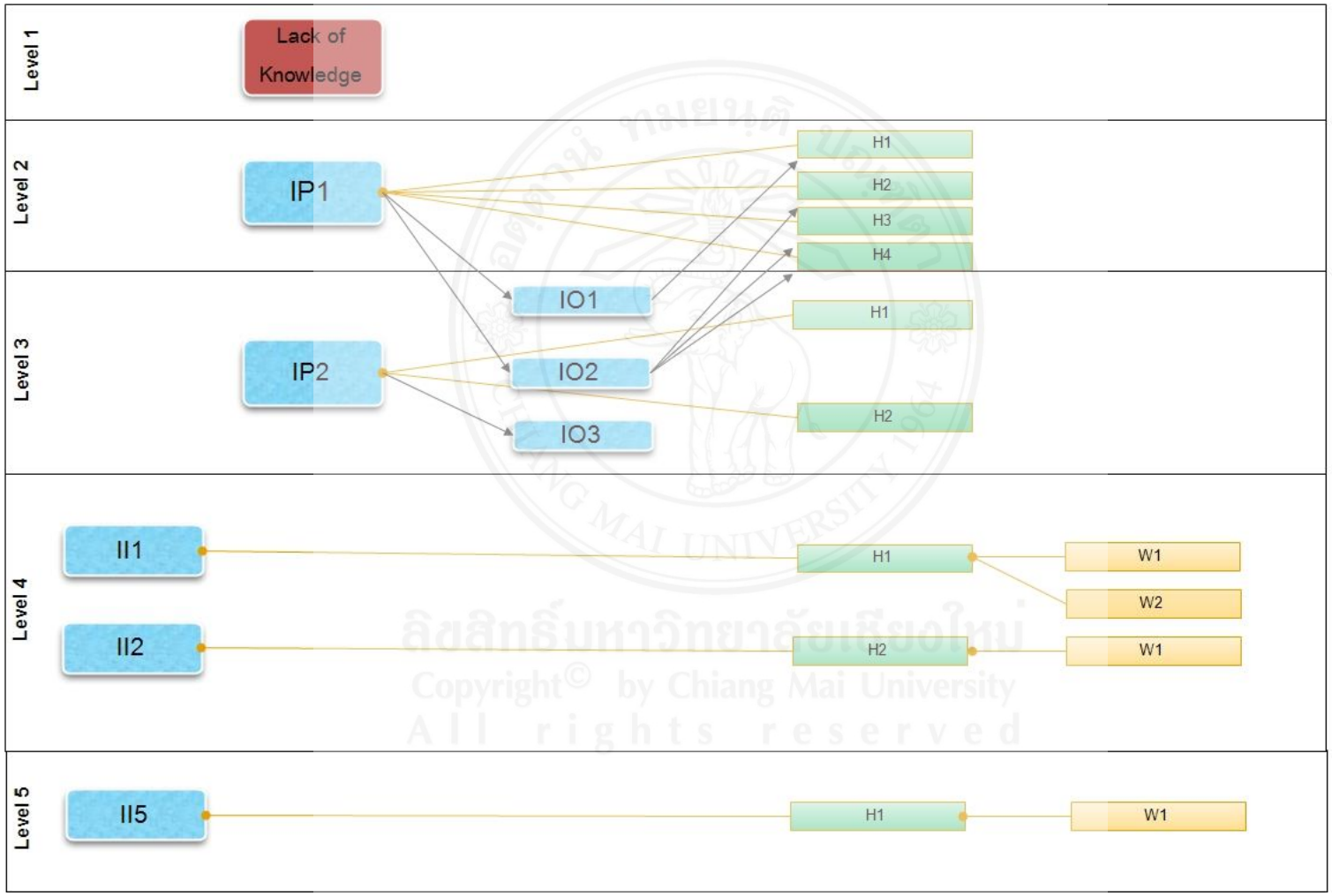
APPENDIX E

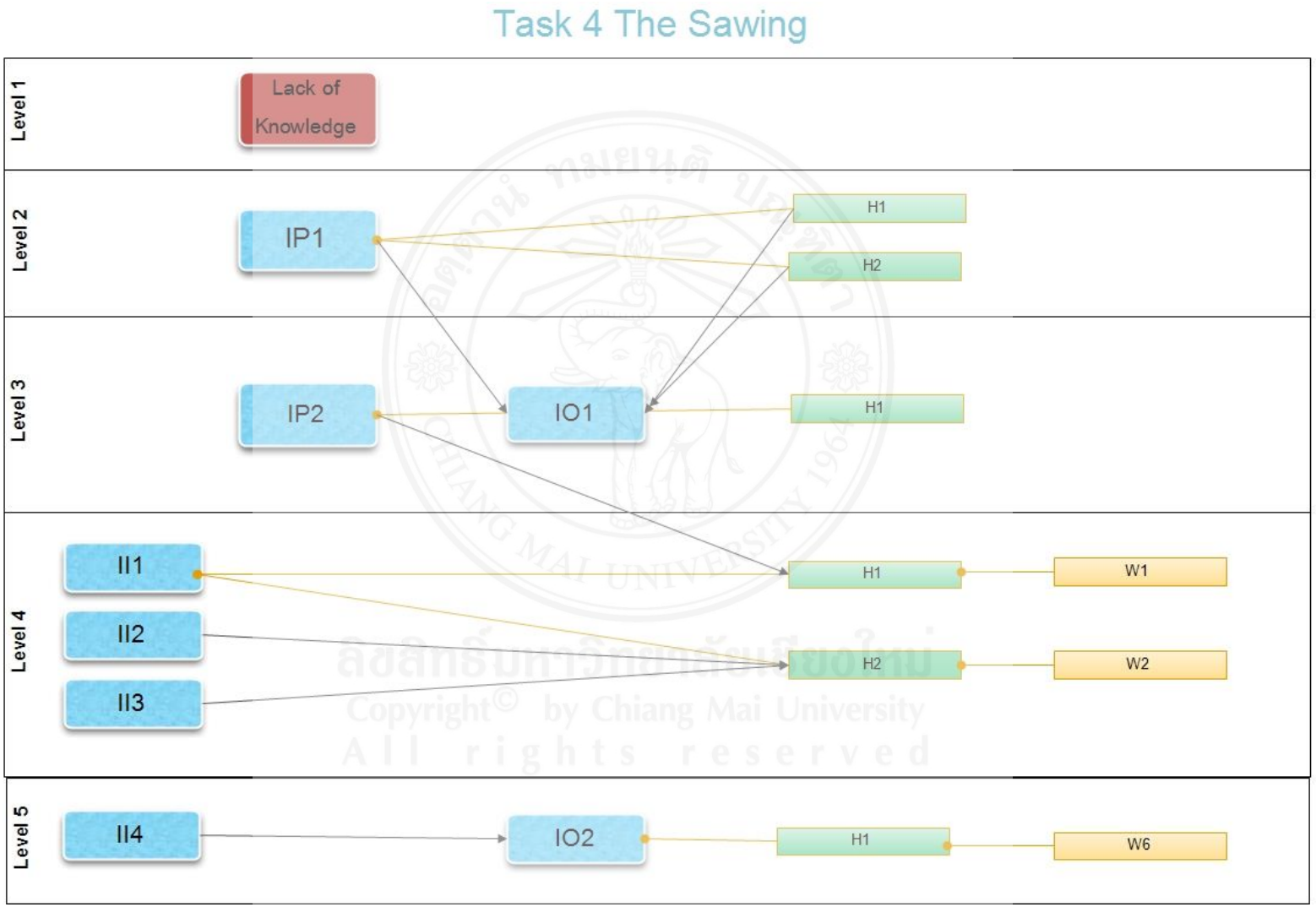
System Thinking Knowledge Linkage

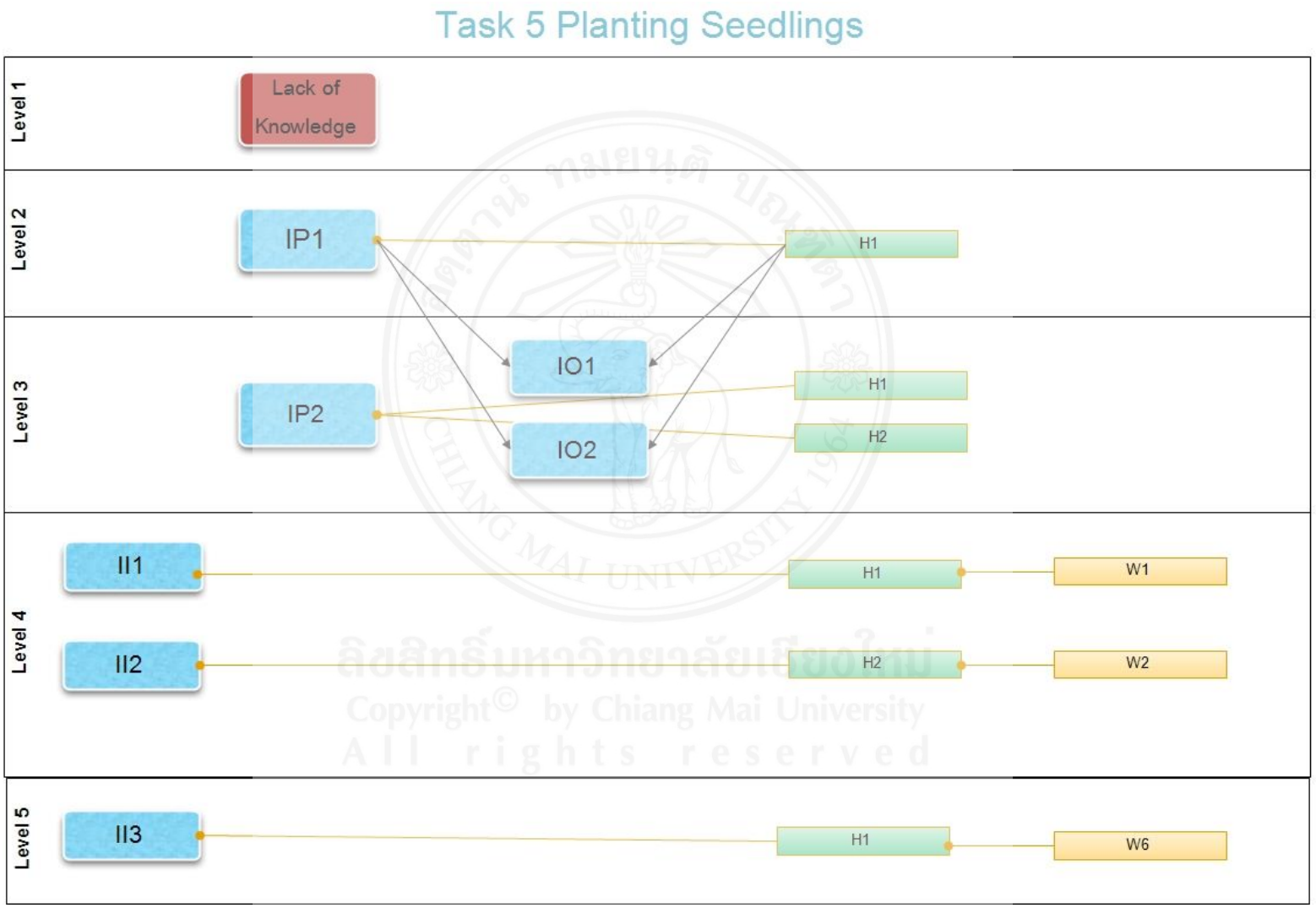




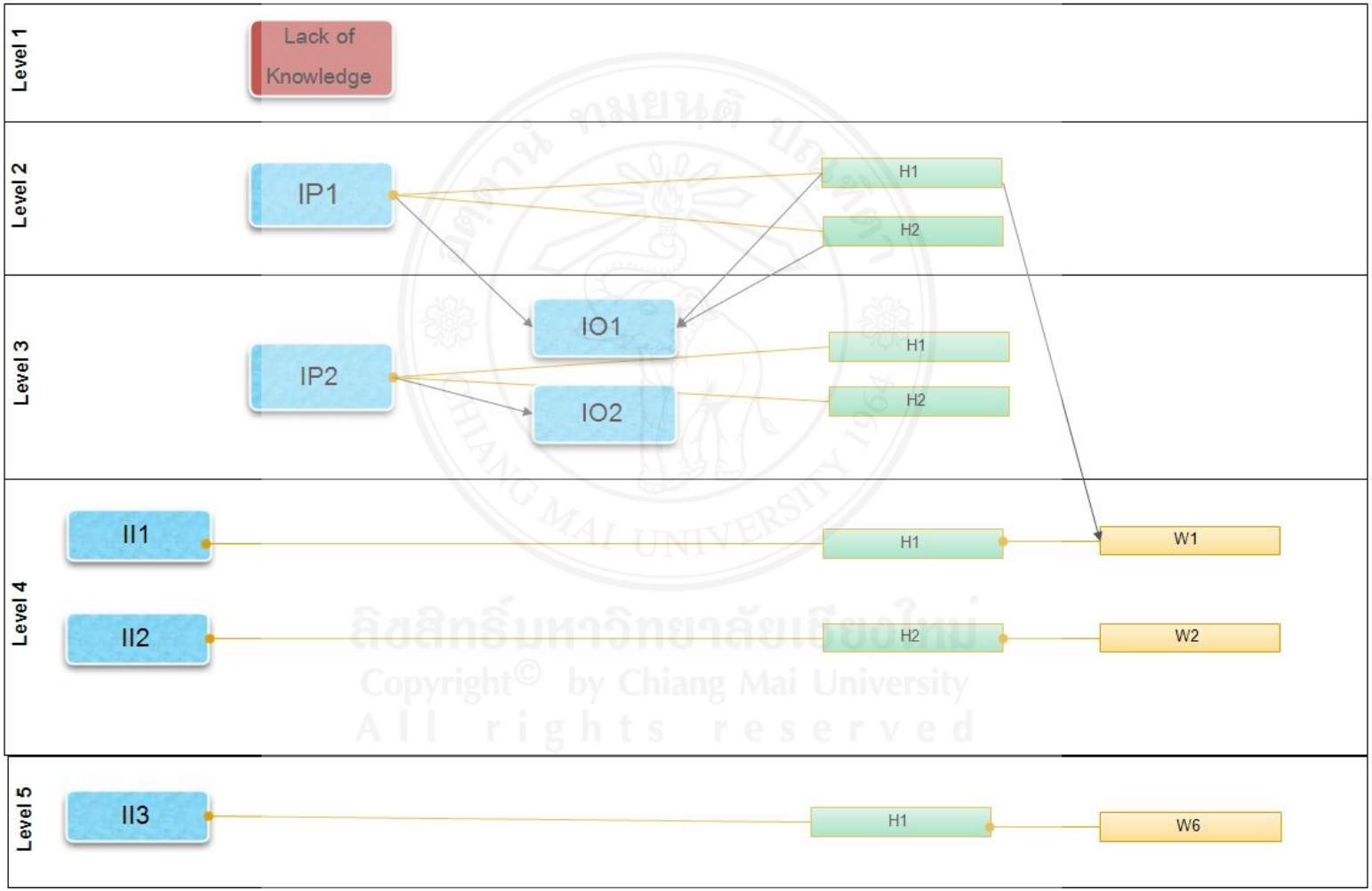
Task 3 Digging Holes

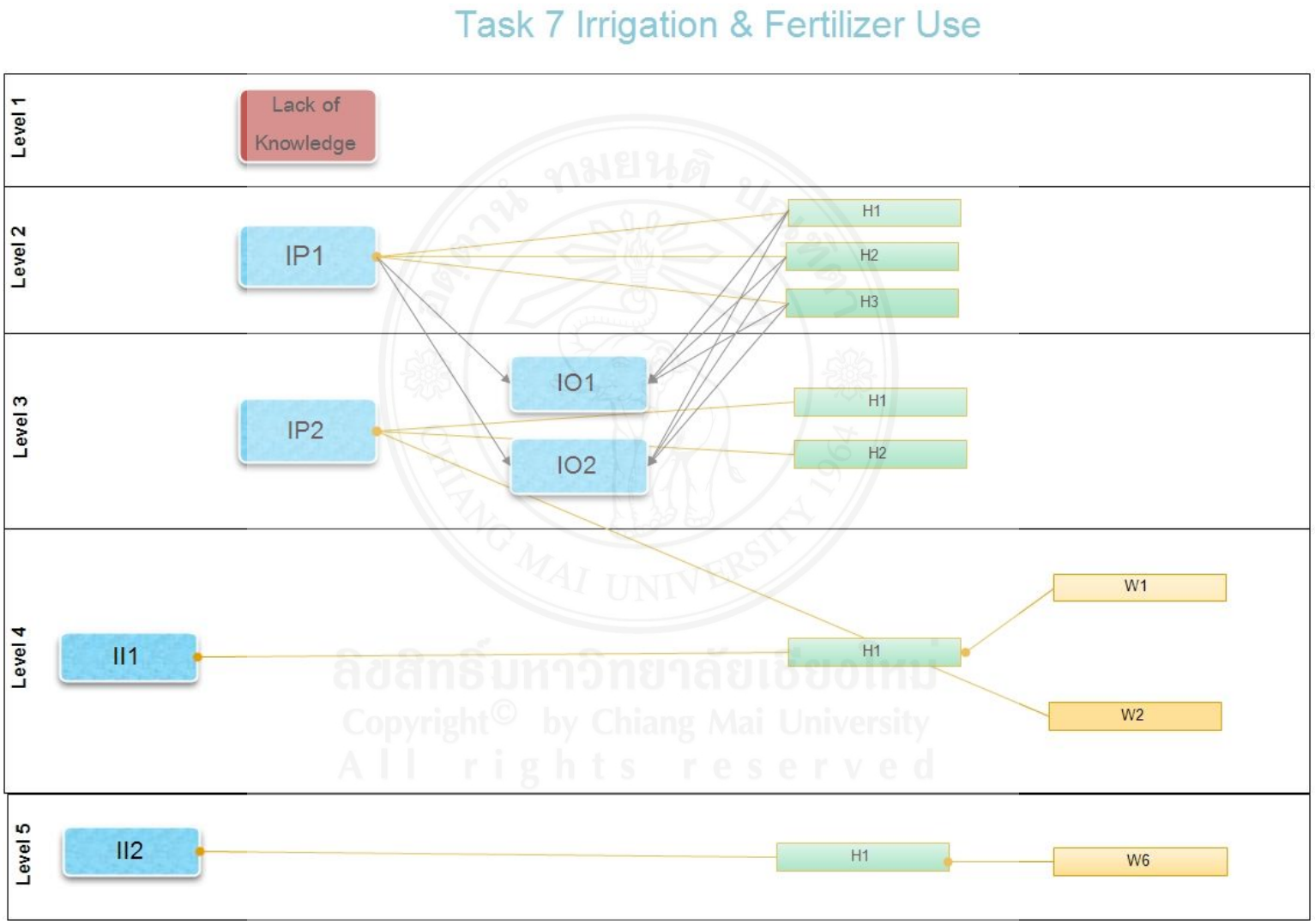




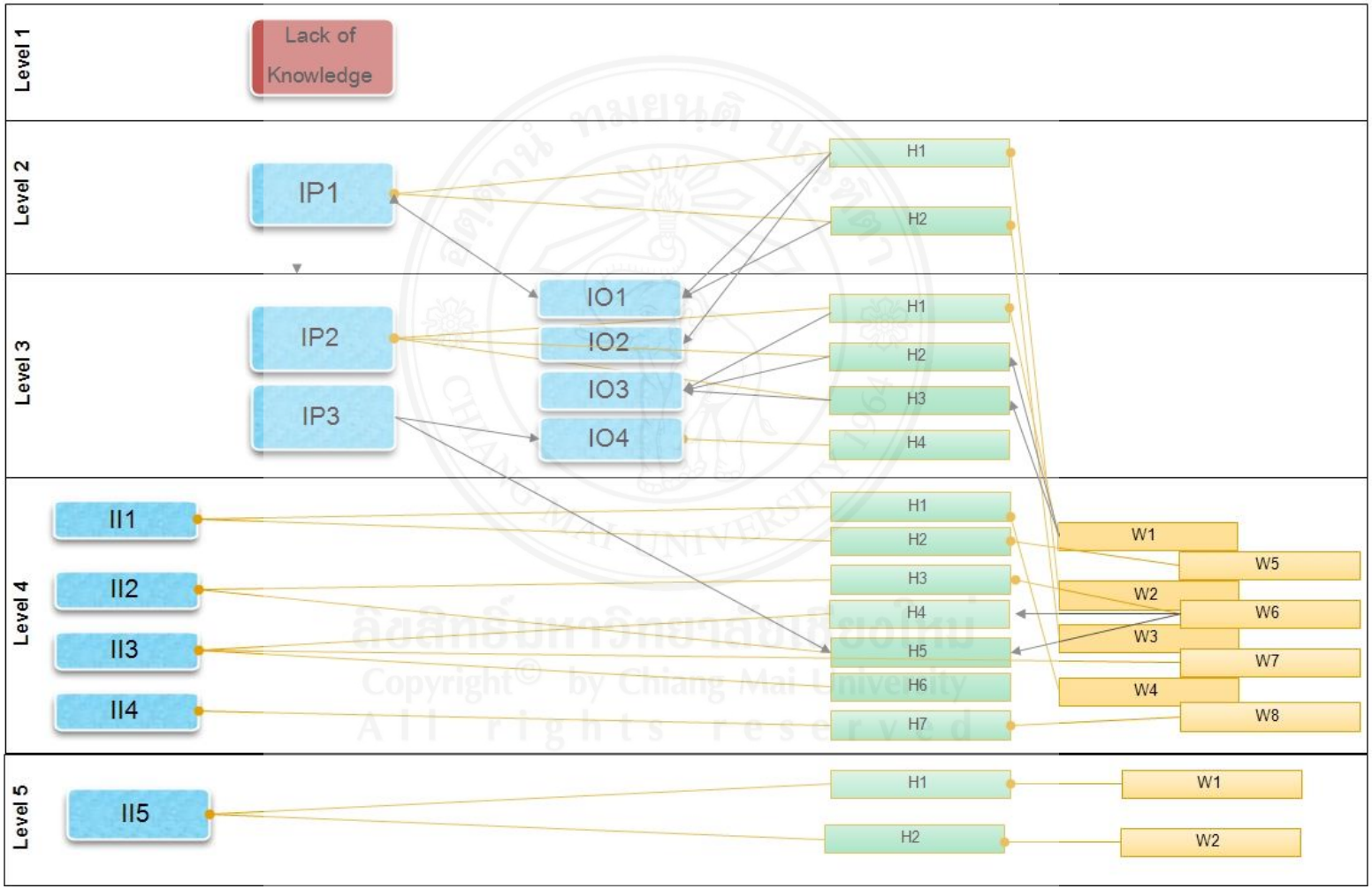


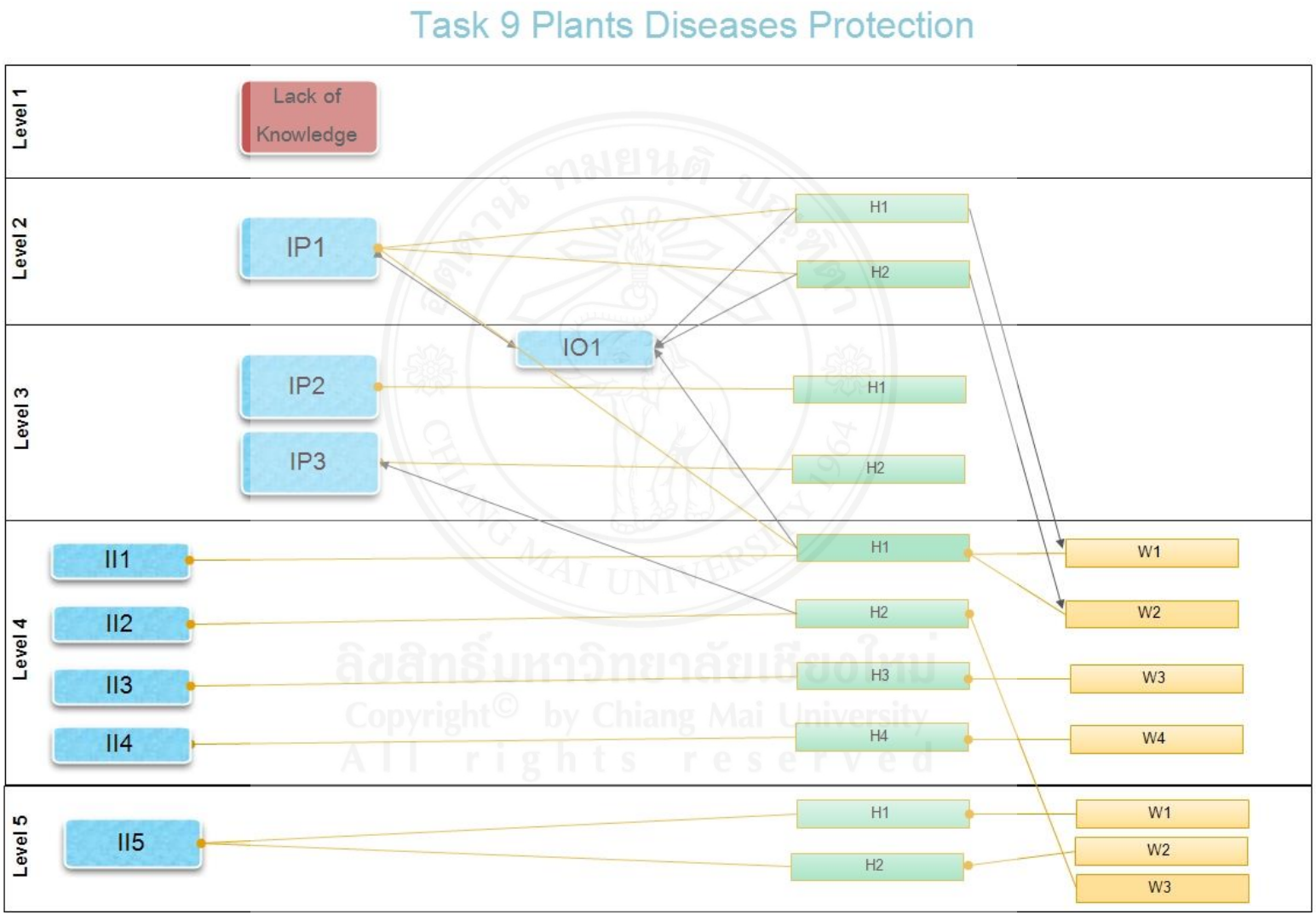
Task 6 Transplanting



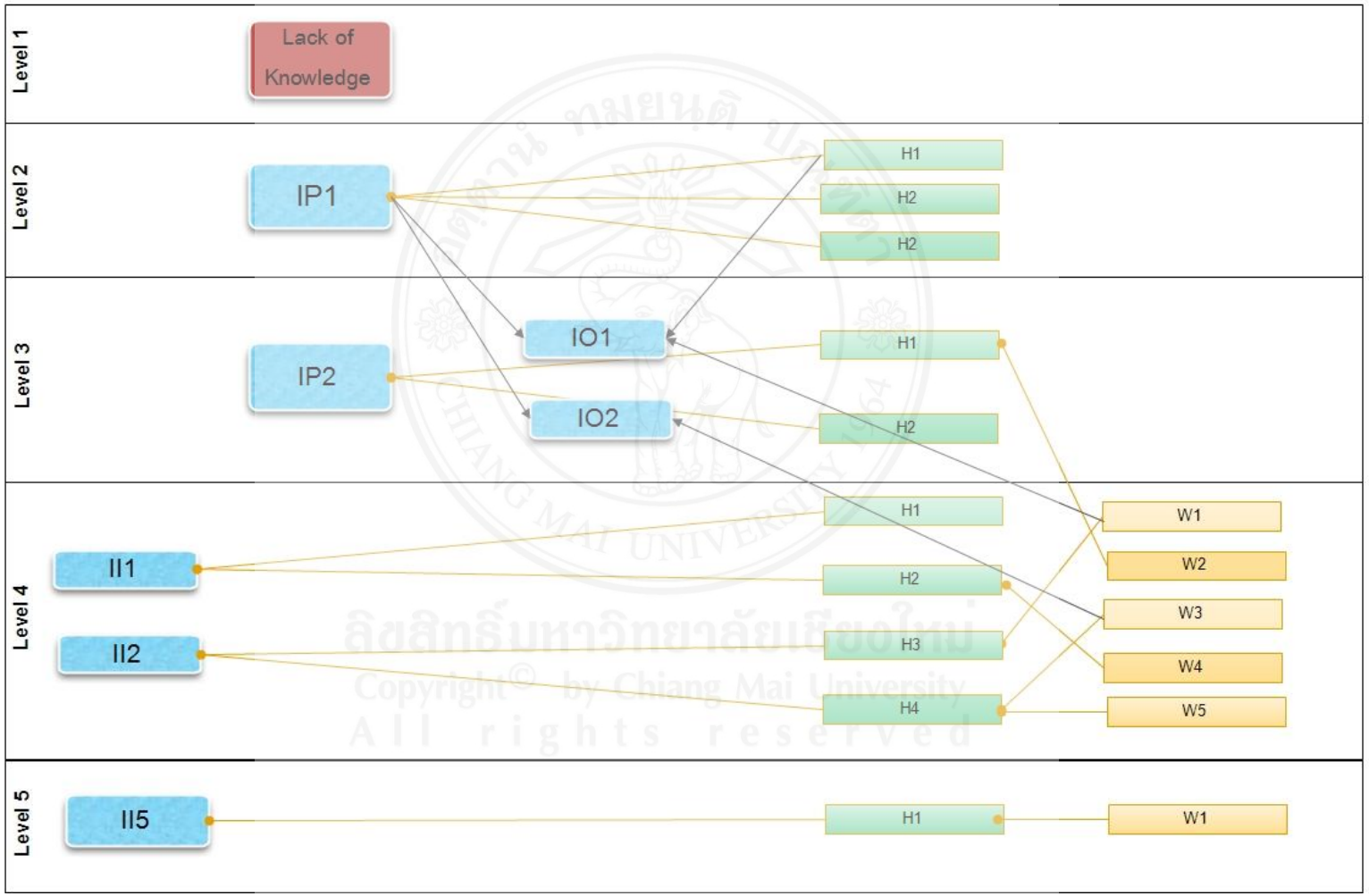


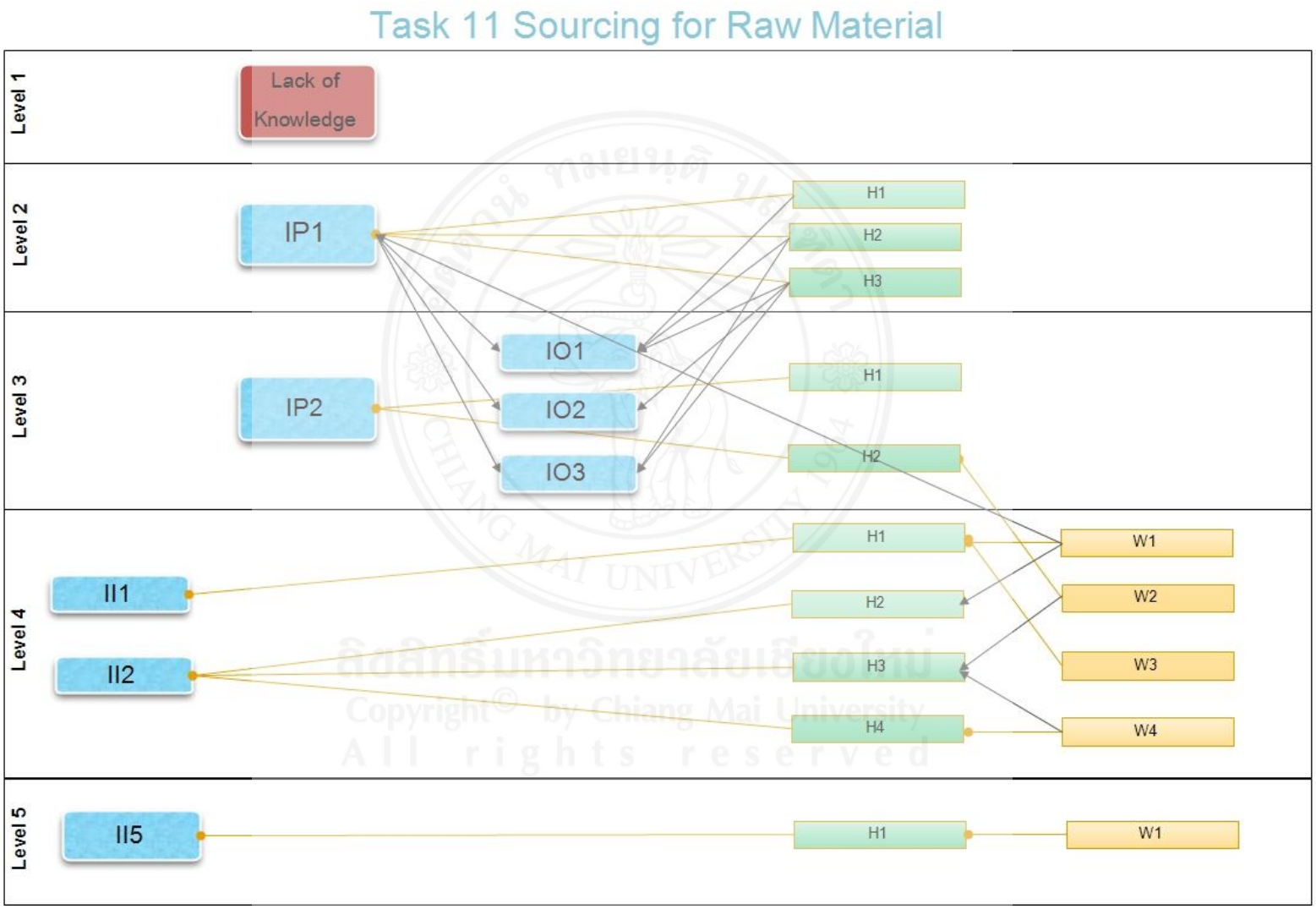
Task 8 Plants Protection from Insects



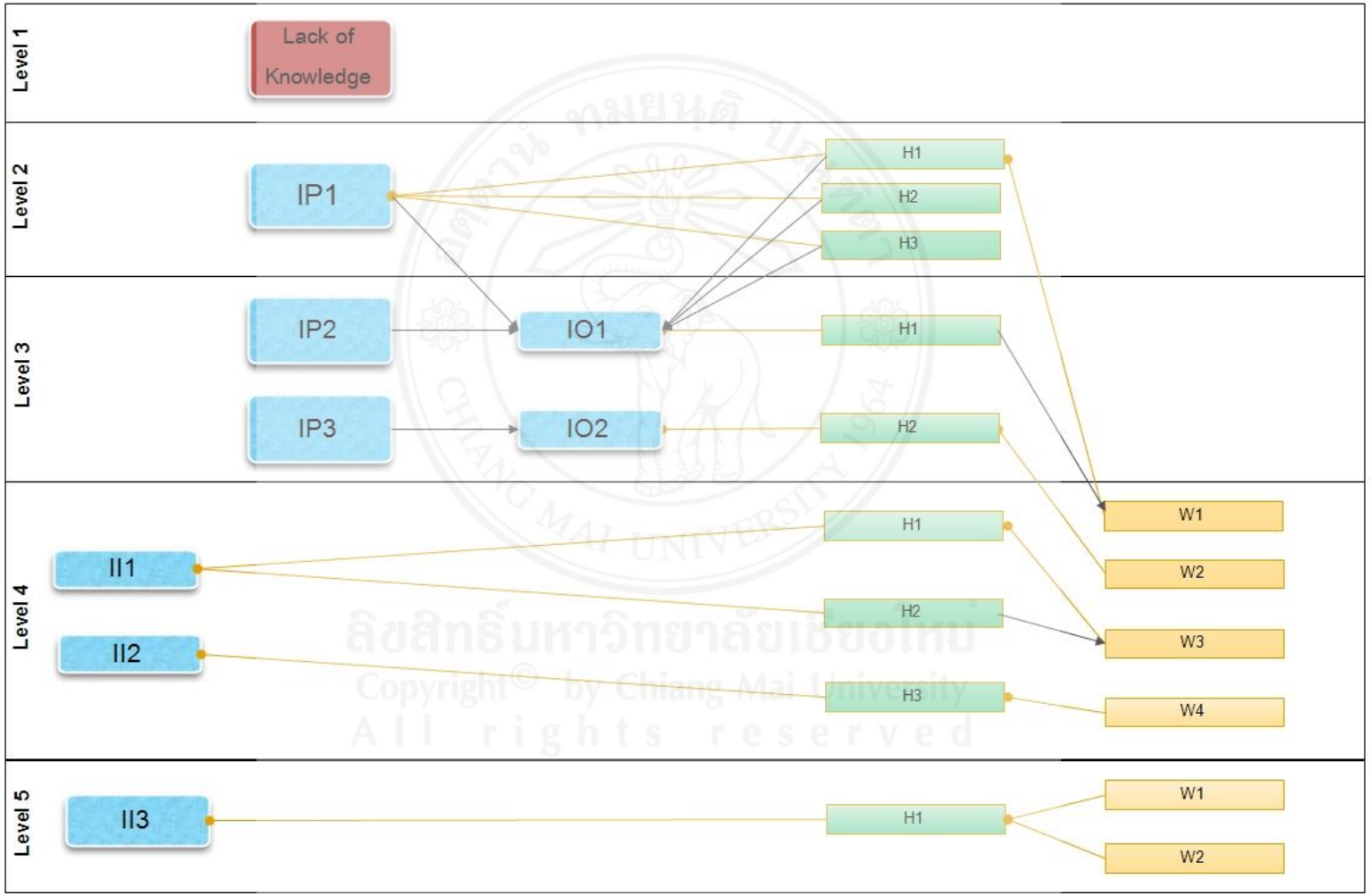


Task 10 Harvesting

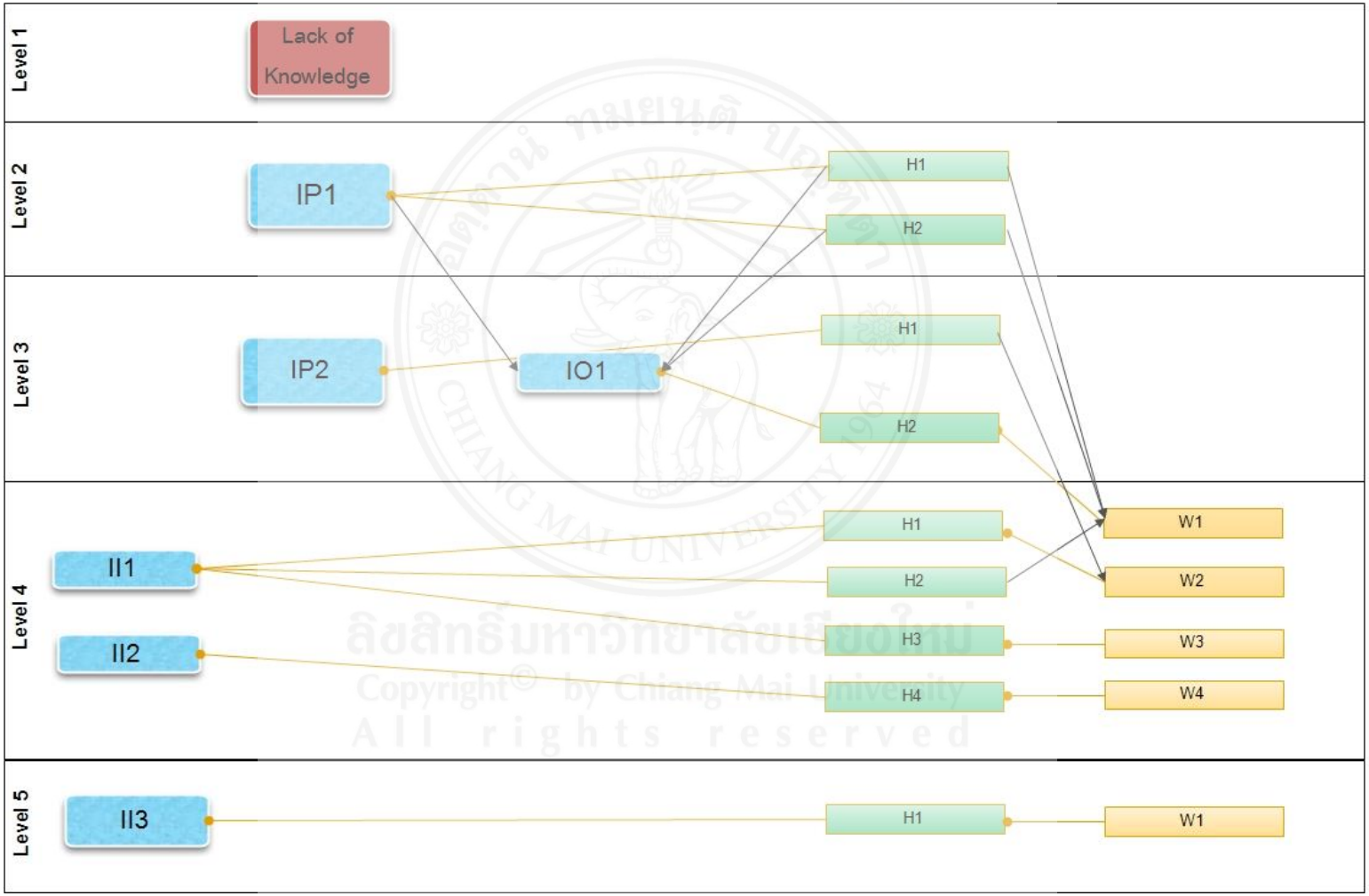




Task 12 Selecting, Grading, Trimming and Packing



Task 13 Production Delivery



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	Chatchawal Telavanich, Nopasit Chakpitak, Tirapot Chandarasupsang & Tamprasirt Anukul., "Grower Maturity Model for Perishable Supply Chain Improvement under Competitive Environment", Proceeding paper of 5th IEEE International Conference on Software, Knowledge: Information Management and Applications (SKIMA2011). University of Sannio Benevento, Italy., September 8-11, 2011.

Chatchawal Telavanich, Nopasit Chakpitak, Tirapot Chandarasupsang & Tamprasirt Anukul, "Grower Maturity Model for Thai Grower to Improve Capability and Risk Reduction in Supply Chain", Proceeding paper of The Sixth International Conference on SKIMA (Software Knowledge Information Management and Application), Chengdu, China., September 09-11, 2012.

Chatchawal Telavanich, Nopasit Chakpitak, Tirapot Chandarasupsang, Anukul Tamprasirt, "Cost Reduction in Farm Based Agriculture through Increased Grower's Maturity", Accepted to be published in Kasetsart Journal , Social Science, Vol 35, Issue 3, 2014.

Experience

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