SPECIFICATION

COUNCIL REGULATION (EC) No 510/2006 on protected geographical indications and protected designations of origin
[Insert name, as in 1 below:] "ข้าวหอมมะลิทุ่งกุลาร้องไห้ (KHAO HOM MALI THUNG KULA RONG-HAI)"
EC No: **[for EC use only]**
[Select one, "X":] ☒ PGI PDO

1 NAME [OF PGI OR PDO]

ข้าวหอมมะลิทุ่งกุลาร้องไห้ (KHAO HOM MALI THUNG KULA RONG-HAI)

2 MEMBER STATE OR THIRD COUNTRY

KINGDOM OF THAILAND

3 DESCRIPTION OF THE AGRICULTURAL PRODUCT OR FOODSTUFF

3.1. Type of Product

Class 1.6 Fresh or processed Fruit, Vegetables and Cereals

3.2 Description of the product to which the name in (1) applies

Khao Hom Mali Thung Kula Rong-Hai is rice exclusively produced and processed in Thung Kula Rong-Hai, including and limited to the following five provinces:-

-Roi Et Province (total area of 986,807 rais*) which includes the villages of Amphurs Kasetwisai, Suwannabhumi, Prathoomrat, Ponethrai and Nonghee located within Thung Kula Rong-Hai plain;

-Surin Province (total area of 575,993 rais*) which includes Amphurs Thatoom and Chumponburi located within Thung Kula Rong-Hai plain;

-Srisaket Province (total area of 287,000 rais*) which includes villages of Amphurs Rasisalai and Siladon located within Thung Kula Rong-Hai plain;

-Mahasarakarm Province (total area of 193,890 rais*) which includes villages of Amphur Payakbhumisai located within Thung Kula Rong-Hai plain;

-Yasothorn Province (total area of 64,000 rais*) which includes villages of Amphurs Mahachanachai and Korwang located within Thung Kula Rong-Hai plain.

*(6.25 rais = 1 hectare)

Khao Hom Mali Thung Kula Rong-Hai is grown from the rice seeds' variety Khao Dawk Mali (KDML 105) and RD 15 and is a photo-sensitive paddy. It can be brown rice or white rice (milled rice). Beyond the limits of Thung Kula Rong-Hai, Khao Hom Mali Thung Kula Rong-Hai cannot be produced or processed.

Khao Hom Mali Thung Kula Rong-Hai has been produced in Thung Kula Rong-Hai for more than 50 years and has been exported in substantial quantities for well many years. Khao Hom Mali Thung Kula Rong-Hai has therefore acquired a significant reputation worldwide.

Khao Hom Mali Thung Kula Rong-Hai is produced according to strictly defined and controlled, traditional methods. A unique combination of natural and human factors contribute to its quality and unique character.

The method of production for Khao Hom Mali Thung Kula Rong-Hai is laid down in the "Operating Manual for Member Applying for the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai" (**Please refer to Annex 1 - Operating Manual for Member Applying for the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai**).

The Geographical Indication Act B.E. 2546 (2003) (Annex 6-Geographical Indication Act of Thailand) of the Kingdom Thailand recognises Khao Hom Mali Thung Kula Rong-Hai as being rice exclusively produced in Thung Kula Rong-Hai. The Department of Intellectual Property of Thailand has granted a geographical indication registration certificate for "Khao Hom Mali Thung Kula Rong-Hai" (registration number Sor Chor 50100022) to the provinces of Roi Et, Surin, Sisaket, Mahasarakharn and Yasothon on September 27, 2007 (**Please refer to Annex 2 – registration certificate of Thung Kula Rong-Hai Hom Mali Rice as geographical indication with Thai and English translation**).

The region of Thung Kula Rong-Hai Thai makes up the northernmost part of the Kingdom of Thailand (**Please refer to Annex 3 – map depicting Geographical Area for Khao Hom Mali Thung Kula Rong-Hai**).

It is reported that the cultivation of Khao Hom Mali in Thung Kula Rong-Hai began after the Government of Thailand improved Hom Mali Rice variety and certified it in 1959 naming it "Khao

Dawk Mali 105". Cultivation became more widespread in 1979 when the rice seeds exchange project called for the planting of glutinous rice in place of Thung Kula Rong-Hai area. Farmers were advised to change the new rice seeds every 3 years to maintain purity of the good seeds.

As required under the definition of a geographical indication in the WTO TRIPS Agreement Khao Hom Mali Thung Kula Rong-Hai has a quality, characteristics or reputation attributable to its geographical origin. In the following sections we will explain the reasons, both human and natural, which mean that rice produced in Thung Kula Rong-Hai area is recognised as having a superior and distinctive quality which are:

Physical Characteristics

Khao Hom Mali Thung Kula Rong-Hai is grown from rice seeds Khao Dawk Mali (KDML 105) and Kor Khor or "RD" 15 varieties and is a photo-sensitive paddy. The short photoperiod is preferable for flowering, being compatible with the regular rice growing system that extremely depends on the rain.

Khao Hom Mali Thung Kula Rong-Hai can be brown or white rice (milled rice).

Other physical characteristics of Khao Hom Mali Thung Kula Rong-Hai are:-

- Rice hull : straw yellow color
- Long, Slim, Transparent shinny
- Silky smooth
- Good smell as Pandanus Leaf

Physical Characteristics	Brown Rice	White Rice
Length (mm.)	> 7.0	>7.0
Shape (Length/Width)	> 3.2	> 3.2
Color	Yellowish – Brown	White

Chemical Characteristics:

The chemical characteristics of Khao Hom Mali Thung Kula Rong-Hai are:

- Moisture content no more than 14 %
- Contaminants no more than 0.2 %
- Yellow grains no more than 0.2 %
- mixture of other rice varieties no more than 8 %
- Amylose (%) 14-16 %
- Alkaline Test 6 - 7

Chemical Characteristics (mean value (± 5%))	Brown Rice	White Rice
Protein (%)	7.6	5.4
Vitamin B1 (mg/100g)	0.34	0.18
Vitamin B2 (mg/100g)	0.27	0.07
Vitamin B3 (mg/100g)	5.0	1.2
Iron (ppm)	28	16

As a variety of Khao Hom Mali, Khao Hom Mali Thung Kula Rong-Hai shall follow the standards of Khao Hom Mali listed in “Thai Khao Hom Mali Rice Standards” (Please refer to Annex 7 – Thai Khao Hom Mali Standards)

Other Characteristics:

Other characteristics of Khao Hom Mali Thung Kula Rong-Hai include:

1. Cooking Characteristics (mean values)

Khao Dawk Mali (KDML 105) is known for its best quality. This is because apart from having good cooking quality, the cooked grains are soft and palatable and have impressive fragrance while consuming or cooking. Several bio-chemical traits such as amylose content, gel consistency and gelatinization temperature determine the cooking quality.

Cooking time	15-20 mins
Rice : Water ratio for cooking	1:1 or 1:1.25

2. Aroma and flavour

When cooked, Khao Hom Mali Thung Kula Rong-Hai smells as pandanus leaf and the taste of steamed rice is velvety, spongy and slightly sweet. Khao Hom Mali Thung Kula Rong-Hai has a slight hint of the added condiments when cooked with other ingredients. The newly harvested Khao Dawk Mali (KDML 105) and RD 15 rice grains has a creamy smooth texture when has been boiled.

3.3 Raw materials (for processed products only)

The rice seeds used to produce Khao Hom Mali Thung Kula Rong-Hai have to be grown in Thung Kula Rong-Hai Thai.

The seeds must be Khao Dawk Mali Mali 105 (KDML 105) and Kor Khor or “RD” 15 breeds obtained from the Department of Rice or rice grains producers i.e. farmer’s organization, private organization which are certified by the Rice Department according to the standard of rice grains production.

The only rice eligible is the above mentioned variety from the defined geographical area, since it is only in these conditions that the rice has low amylose (14-16 %) with amylopectin content (86-84%); this allows the rice to absorb a low proportion of the water in which it is cooked and absorb flavours. This outstanding character is possible only in the special geo-morphologic conditions in the North Eastern part of Thailand (nature of the soil, quality of the water use, number of hours of sunshine, narrow range of temperatures, with the cool and dry weather in the harvesting time, etc.) These natural factors have a significant effect on the characteristics, quality and uniqueness of Khao Hom Mali Thung Kula Rong-Hai.

3.4 Feed (for products of animal origin only)

N/A

3.5 Specific steps in production that must take place in the identified geographical area

The cultivation of Khao Hom Mali Thung Kula Rong-Hai shall take place in Thung Kula Rong-Hai in order to ensure that it entirely benefits from the natural and human factors specific to the defined geographical area. The cultivation process has been refined over the years to optimise grain quality and its particular characteristics.

Cultivation, harvesting, moisture reduction, storage of Khao Hom Mali Thung Kula Rong-Hai are governed by special rules which cover dates, phonological stage and moisture of the grain as a way of guaranteeing the quality, hygiene and safety of Khao Hom Mali Thung Kula Rong-Hai, it also ensures the complete traceability of Khao Hom Mali Thung Kula Rong-Hai to Thung Kula Rong-Hai and even, to the original farmer or producer. The processing shall take place in Roi Et, Surin, Sisaket, Mahasarakham, and Yasothon Provinces, which are the five provinces of Thung Kula Rong-Hai area , this being justified on the above mentioned grounds. Those rules are found in the Operating Manual for Member Applying for the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai (**Please refer to Annex 1 - Operating Manual for Member Applying for the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai**).

There is also a system which allows Khao Hom Mali Thung Kula Rong-Hai to be traced back across every production stage to its origin. In order to allow the trace back conditions and to assure traceability of Khao Hom Mali Thung Kula Rong-Hai a verification system has been implemented.

Production Process

In addition to natural factors, human factors also have a significant effect on the quality and character of Khao Hom Mali Thung Kula Rong-Hai. The whole process for the production of Khao Hom Mali Thung Kula Rong-Hai has been refined over the years to optimise quality and to produce a particular character.

I. Cultivation

(1) The cultivation area of Khao Hom Mali Thung Kula Rong-Hai shall exclusively be within Thung Kula Rong-Hai . Beyond the limits of Thung Kula Rong-Hai, Khao Hom Mali Thung Kula Rong-Hai cannot be produced, processed and so on.

(2) Khao Hom Mali Thung Kula Rong-Hai is grown from the rice seeds' variety Khao Dawk Mali (KDML 105) and Kor Khor or "RD" 15 only.

The rice seeds Khao Dawk Mali 105 and Kor Khor or "RD" 15 breeds shall be obtained from reliable sources such as the Rice Department or Rice grains production sources i.e. Farmer Organization, private organizations which are certified by the Department of Rice according to the standard of rice grains production. In the situation where farmers would conduct their own breeding, they shall bring their breeds for certification every 3 years.

(3) The paddy is grown between April to August in Thung Kula Rong-Hai

(4) Khao Dawk Mali 105 and Kor Khor or "RD" 15 breeds are harvested between October to December. Harvesting occurs between 25 to 35 days commencing from the flowering of the paddy. Harvesting can be done manually or with the help of machineries. If a machine is used for threshing other rice than Khao Dawk Mali 105 and Kor Khor or "RD" 15 breeds, it shall be completely cleaned to remove all left over of grains prior to the threshing of KDML 105 and Kor Khor or "RD" 15.

(5) Moisture reduction: Yield presented at moisture 14-15 % by dried after harvested 2-3 days in the farm with proper turn over. Drying dates shall be properly recorded.

(6) Farmers who want to use the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai shall register as producing members of the Association of Khao Hom Mali Thung Kula Rong-Hai each year in the early growing season as required according to the Operating Manual for Member Applying for the use of the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai (Annex 1 - Operating Manual for Member Applying for the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai).

Records of the production process must be kept by the producers and there must be as a system in place whereby it is possible to trace back to the different stages of rice growth from cultivation up to the milling.

II Processing

(1) Khao Hom Mali Thung Kula Rong-Hai has to be processed in the five provinces, namely Roi Et, Surin, Srisaket Mahasarakam and Yasothon

(2) The processors or rice millers;

2.1 Must be registered as processors of Khao Hom Mali Thung Kula Rong-Hai.

2.2 These Rice millers also must be certified for quality, environment and food safety practices.

(3) The processing management for Khao Hom Mali Thung Kula Rong-Hai must be as follows ;

3.1 The buying of paddies (for the miller, not the case of farmers process their own rice);

1) The miller will buy the paddies from the farmers who have registered to be the members before planting season which designed for the production of Khao Hom Mali Thung Kula Rong-Hai.

2) The name of farmers, producing location, rice variety, recording of buying date, and quantity must be specifies report daily and monthly.

3) Khao Hom Mali Thung Kula Rong-Hai must be stored separately from the other paddies.

4) Paddies must be checked for the quality; such as moisture content, percentage of head rice, contamination, yellow grain and other rice varieties.

3.2 Milling

1) The processing of Khao Hom Mali Thung Kula Rong-Hai,amount of paddies, milled rice must be recorded.

2) Before milling the Khao Hom Mali Thung Kula Rong-Hai, the machine must be properly cleaned.

3) Packaging for Khao Hom Mali Thung Kula Rong-Hai must be identified the name of producers, production date and lot numbers .

III Transportation, Stored pile, Quality Maintenance and Delivery

(1) There must be a controlling system for transportation, stored pile packaging, withdrawing and maintenance of the product throughout the receiving, processing and delivery stage.

(2) There must be a proper storage separately from the other kind of rice, for maintaining the quality. The label of the production date and lot numbers must be filled up on the bill card. The Storage area of Khao Hom Mali Thung Kula Rong-Hai must be kept clean, sanitized and in a closed surrounding with good ventilation. Khao Hom Mali Thung Kula Rong-Hai shall be compartmented in order to prevent possible contamination from other varieties of rice. Equipments and vehicles used for the transportation of rice must be clean in order to prevent contamination of Khao Hom Mali Thung Kula Rong-Hai from other varieties rice. Stored and transported Khao Hom Mali Thung Kula Rong-Hai must be labelled with code or symbol showing the batch number (date of harvesting) or its source.

IV Proof of Origin

(1) Khao Hom Mali Thung Kula Rong-Hai must be cultivated within Thung Kula Rong-Hai plain.

(2) Processing and packaging must be performed in five provinces, namely Roi Et, Surin, Srisaket, Mahasarakam and Yasothon

(3) The production process must be controlled and monitored through the registration of farmers cultivating Khao Hom Mali Thung Kula Rong-Hai and members processing Khao Hom Mali Thung Kula Rong-Hai. There must also be the use of a data recording system and accompanying documents making the product traceable to its origin.

3.6 Specific rules concerning slicing, grating, packaging, etc.

Khao Hom Mali Thung Kula Rong-Hai must be packaged in Roi Et, Surin, Sisaket, Mahasarakham, and Yasothon Provinces, which are the five provinces of Thung Kula Rong-Hai area. This is to give a guarantee on the origin and the quality of the rice and at the same time ensure the health and safety of consumers by managing hygiene standards, avoiding contamination, excluding rice from other

sources, avoiding quality deterioration and maintaining traceability, which makes it possible to track the product through the production process and supply chain. Khao Hom Mali Thung Kula Rong Hai must be packaged within the 5 provinces of Thung Kula Rong Hai area in order to ensure the retention of 2-acetyl-1-pyrroline **(0.1-0.2 micro grams at the growing field)**, unique to Khao Hom Mali grown within the identified geographical area. The repackaging is not allowed in order to **minimise possible** dilution in concentration, which would undermine its distinctive aroma and to prevent any possible contamination or alteration of the product.

3.7 Specific rules concerning labelling

The labelling and presentation of Khao Hom Mali Thung Kula Rong-Hai has always been governed by the common principles on labelling, such as the weight the date and the name of the mill or the name of the cooperative must be specified. These principles are found in the Food Act 1979, the Consumer Protection Act 1979 The Product Liability Act 2008 of the Kingdom of Thailand.

The Association of Khao Hom Mali Thung Kula Rong-Hai has introduced specific rules governing the labelling and presentation of Khao Hom Mali Thung Kula Rong-Hai:

- The label on the packaging shall bear the words “ข้าวหอมมะลิทุ่งกุลาร้องไห้” and/or “Khao Hom Mali Thung Kula Rong-Hai : TKR”. This is according to Article 6.3 of the Operating Manual for Member Applying for the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai where it is specified that packed products must be labelled as “Khao Hom Mali Thung Kula Rong-Hai: TKR”.

- Moreover, the following official Thai Geographical Indication logo shall also appear on the label of Khao Hom Mali Thung Kula Rong-Hai:-

According to the Operating Manual for Member Applying for the use of the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai packed products labelled as “Khao Hom Mali Thung Kula Rong-Hai” shall also specify the batch number (date of harvesting) or its source, date of packing, packers, quantity (1, 2, 5, 15, 50, 100 kilograms) and the producer, processor or distributor’s trade mark (if any). (**Annex 1 - Operating Manual for Member Applying for the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai)** Attached are samples of products bearing the label “ Thung Kula Rong-Hai Thai Hom Mali” (please refer to Annex 10 – Labels of Thung Kula Rong-Hai Thai Hom Mali).

4. CONCISE DEFINITION OF THE GEOGRAPHICAL AREA

The geographical area of Khao Hom Mali Thung Kula Rong-Hai where all the processes take place, from seeding, cultivation, harvesting, milling, storing, packaging to labeling is Thung Kula Rong-Hai which is composed of the following five provinces: Roi-et, Mahasarakam, Surin, Yasothon and Srisaket.

Khao Hom Mali Thung Kula Rong-Hai has a quality, characteristics and reputation attributable to its geographical origin as detailed on the map (**Annex 3 – map depicting the geographical area for Khao Hom Mali Thung Kula Rong-Hai**). The area lies in:

4.1 Roi Et Province (total area of 986,807 rais*) which includes the villages of Amphurs Kasetwisai, Suwannabhumi, Prathoomrat, Ponethrai and Nonghee located within Thung Kula Rong-Hai plain;

4.2 Surin Province (total area of 575,993 rais*) which includes Amphurs Thatoom and Chumponburi located within Thung Kula Rong-Hai plain;

4.3 Srisaket Province (total area of 287,000 rais*) which includes villages of Amphurs Rasisalai and Siladon located within Thung Kula Rong-Hai plain;

4.4 Mahasarakarm Province (total area of 193,890 rais*) which includes villages of Amphur Payakbhumisai located within Thung Kula Rong-Hai plain;

4.5 Yasothorn Province (total area of 64,000 rais*) which includes villages of Amphurs Mahachanachai and Korwang located within Thung Kula Rong-Hai plain.

*(6.25 rais = 1 hectare)

5. LINK WITH THE GEOGRAPHICAL AREA

5.1 Specificity of the geographical area

Natural and human factors play an integral role on the production of Khao Hom Mali Thung Kula Rong-Hai and in particular in the rice cultivation. Human wisdom also plays an important role in the production of this rice, which begins with the selection of quality seeds, observing suitable cultivation methods, constructing bunds and segmenting the paddy field into sections to retain sufficient water for the rice to grow.

Thung Kula Rong-Hai Plain has a soil type made of a combination of clay on the top and low fertile clay at the bottom. The pH of soil is about 4.0-5.5 and the organic content is about 0.5%. The available phosphorus is 5.7 ppm (mg/kg soil). The extractable potassium is 5.4 ppm. The soil series of Thung Kula Rong-Hai Plain are Roi-Et, Tha-toom, Kula Rong-Hai and Udorn.

During the beginning and ending of the growing season, the rice plant or paddy faces with drought whereas during the rainy season, the rice field is flooded with water for a certain period of time which is suitable for growing Khao Hom Mali Thung Kula Rong-Hai. The climate during the grain bearing period is dry which allows the incubation of the Khao Hom Mali Thung Kula Rong-Hai grains to reach its best quality. The key factors for the quality of Khao Hom Mali Thung Kula Rong-Hai are the alkalinity of soil, the drought of the area, rice breed, climate and soil nutrients.

The special characteristic of Thung Kula Rong-Hai plain is a plateau which slopes down to the center. The soil is a combination of clay with proper alkalinity because it situates on Mahasarakarm rock series which is a salted rock bed. This

facilitates the growing of the best quality of Khao Hom Mali Thung Kula Rong-Hai.

The climate of Thung Kula Rong-Hai plain is warm and humid, with flood during the rainy season in some years. The average annual precipitation ranges from 1,000-1,400 mm. The dry period occurs before July.

Water is drained from the fields about 10 days before the harvest, when mature rice is cut and dried for 2-3 days to reduce moisture. These are the natural factors and local wisdom which affect the quality of Khao Hom Mali Thung Kula Rong-Hai.

5.2 Specificity of the product

Khao Hom Mali Thung Kula Rong-Hai refers to paddies, brown rice and milled rice processed from photo-sensitive rice variety: the Khao Dawk Mali 105 and RD 15, grown in the rainy season of Thailand in Thung Kula Rong-Hai and bearing a natural aroma.

5.3 Causal link between the geographical area and the quality or characteristics of the product (for PDO) or a specific quality, the reputation or other characteristic of the product (for PGI)

The Thung Kula Rong-Hai plain is a large plain in the Northeastern region, located in five provinces namely Roi Et, Mahasarakam, Surin, Yasothon and Srisaket. Having a total of 2,107,690 rai, (6.25 rai = 1 hectare) its former name was Thung Mah Long or Thung Pu Pa Lan.

The name of “Thung Kula Rong-Hai” is derived from the legend of the “Kula merchants” who had been walking endlessly through the field to sale their products but could not pass cross the fields to reach the other side of the land. They, therefore, had to cry because of their exhaustion. Kula or Kulah is an ethnic group, officially known as Tong Soo, Dong Soo or Tong Zoo, who had been trading in the north eastern Thailand. Thus, the plain was given the name “Thung Kula Rong-Hai” (The plain of the crying “Kula”). (Please refer to **Annex 4 - Legend of Khao Hom Mali Thung Kula Rong-Hai of the World**).

It is reported that the cultivation of Khao Hom Mali in Thung Kula Rong-Hai began after the government improved the Khao Hom Mali variety and certified it in 1959 naming it “ Khao

Dawk Mali 105". Cultivation became more widespread in 1979 when the rice seeds exchange project called for the planting of glutinous rice in place of Thung Kula Rong-Hai area. Farmers were advised to change the new rice seeds every 3 years to maintain purity of the good seeds.

Because the paddy was dependent on rain water, the cultivation could only be carried out once a year. Harvesting take place in the cold season when the weather is cold and dry because of the ending of rainy season. According to local wisdom, a flooded paddy field needs to be drained about 10-15 days before the harvesting to obtain good quality rice physical with long and slim, clear and sturdy grains. The cooked rice would be soft and fragrant. This practice, coupled with high standard processing methods, give Khao Hom Mali Thung Kula Rong-Hai its unique quality, distinctive from Hom Mali Rice grown in other areas and making Khao Hom Mali Thung Kula Rong-Hai accepted by traders and consumers both domestically and internationally.

The slightly salinity of the soil in the Northern part of Thailand, the cool and dryness of the area, the specific rice varieties (KDML 105 and RD 15) used, the climate and soil nutrients cause the paddy to become stressed and to produce an aromatic substance called 2-acetyl-1-pyrroline (2-A-1-P) which is in the same as substance in pandanus leaf resulting in a fragrance.

The Association of Khao Hom Mali Thung Kula Rong-Hai

The Association of Khao Hom Mali Thung Kula Rong-Hai is the trade association of the Khao Hom Mali Thung Kula Rong-Hai. It was incorporated on **May 2nd** ,2008 as an association according to the Trade Association Act B.E. 2551 under the supervision of Roi Et's Department of Business Development.

The Association of Khao Hom Mali Thung Kula Rong-Hai has its own rules and regulation "A Regulation of Thung Kula Rong-Hai Geographical Indicator of Thai Hom Mali Rice Trader Association (T-GIRA)" **(Please refer to Annex 5 - Regulation of Thung Kula Rong-Hai Geographical Indicator of Thai Hom Mali Rice Trader Association T-GIRA)**

A member applying for the use of the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai to the Association of Khao

Hom Mali Thung Kula Rong-Hai shall comply with the Operating Manual for Member Applying for the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai (**Annex 1 - Operating Manual for Member Applying for the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai)**

Members of the Thung Kula Rong-Hai Geographical Indication of Thai Hom Mali Rice Trader Association include farmers, agricultural institutes, community enterprises, milling entrepreneurs, exporting entrepreneurs located in Thung Kula Rong-Hai region.

One of the Association of Thung Kula Rong-Hai Hom Mali Rice's main objects is to protect and promote the geographical indication Thung Kula Rong-Hai Hom Mali Rice, both at home and abroad, as well as

- Enhancing trade including cultivation, production, and distribution of Hom Mali rice in Thung Kula Rong-Hai region, including Roi Et Province, Mahasarakham Province, Yasothon Province, Sisaket Province, and Surin Province, at national and international levels.
- Organizing inspection and control of cultivation, production, and market in relation to 5.1.
- Arranging the registration of Khao Hom Mali Thung Kula Rong-Hai cultivator, producer or trader who intends to use the geographical indication of Khao Hom Mali Thung Kula Rong-Hai.
- Maintaining benefits and disseminating members' reputation, assisting members on welfare and public charity issues.

as it can be seen from article 5 of the Regulation of Thung Kula Rong-Hai Geographical Indication of Thai Hom Mali Rice Trader Association T-GIRA **(Please refer to Annex 4 - A Regulation of Thung Kula Rong-Hai Geographical Indicator of Thai Hom Mali Rice Trader Association T-GIRA).**

The Association of Khao Hom Mali Thung Kula Rong-Hai is a private body funded by its members. Membership to the association is compulsory. Anyone who wants to use the

geographical indication “Khao Hom Mali Thung Kula Rong-Hai” shall be registered as a member of the Association of Khao Hom Mali Thung Kula Rong-Hai and shall comply with the legal definition of Khao Hom Mali Thung Kula Rong-Hai and all other requirements prescribed in the Operating Manual for Member Applying for the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai (Please refer to **Annex 1 - Operating Manual for Member Applying for the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai**).

The Association of Khao Hom Mali Thung Kula Rong-Hai is recognised as the representative body of Thung Kula Rong-Hai Hom Mali Rice by the Government of the Kingdom of Thailand. The Association of Khao Hom Mali Thung Kula Rong-Hai has also been involved in negotiations on behalf of the Khao Hom Mali Thung Kula Rong-Hai with the Government of Thailand since its incorporation. Moreover, the Association of Thung Kula Rong-Hai Hom Mali Rice has also its own official logo:

Based on the above facts, it is submitted that The Association of Khao Hom Mali Thung Kula Rong-Hai is the appropriate body to register the geographical indication “Khao Hom Mali Thung Kula Rong-Hai”.

Controls on the production and processing of Khao Hom Mali Thung Kula Rong-Hai

- Internal Control

The whole production process of Khao Hom Mali Thung Kula Rong-Hai takes place under the control of The Association of Khao Hom Mali Thung Kula Rong-Hai. Detailed records of every stage in the production process, starting with the plantation of rice seeds and cultivation until it is packed for sale to the public must be kept. The Association of Khao Hom Mali Thung Kula Rong-Hai can therefore check and validate the whole production process. It also has the power to inspect the production and storage processes at any time without notice.

The production process and products must be inspected according to the internal control system (ICS) organized by the Association of Khao Hom Mali Thung Kula Rong-Hai.

Products sold under “Khao Hom Mali Thung Kula Rong-Hai” are subjected to sampling for quality control as follows:

- Traceability from purchasing point all to the way to the farmer

- Quality inspection

(1) Physical characteristics

Length (mm)	Ratio between Length and Width	Thong Khai	Fragrance level
>7.0	>3.2	<6%	yes

(2) Chemical characteristics

Amylose Enzyme (%)	Degradation in Alkaline (level)
14-16	6-7

(3) Other characteristics

Moisture (%)	Contaminants (%)	Yellow Rice (%)	Contaminated Breed (%)
<14	<2	<0.2	<8

Applicants who wish to use the geographical indication of Khao Hom Mali Thung Kula Rong-Hai shall register with the Association of Thung Kula Rong-Hai Hom Mali Rice. It includes farmers, rice collectors, processors, packers, and distributors.

Withdrawal or changes of any data of member shall be notified to the Registrar. If the notification has not been made, the membership shall be terminated.

- External Control

Regulation (EC) No.510/2006 on Geographical Indication and designation of origin for agricultural products and foodstuffs requires that the product bearing the protected designation of origin or protected geographical indication are in compliance with the product specification (Article 4 paragraph 2) and that the requirements are verified by a recognized control body. This control is organized by the company Bioagricert S.R.L (Please refer to Annex 8 – Control Plan Geographical Indication Khao Hom Mali Thung Kula Rong-Hai)

Reference to publication of the specification

(Article 5 (7) of Regulation (EC) No 510/2006)

List of Annexes

"KHAO HOM MALI THUNG KULA RONG-HAI"

Annex 1 - Operating Manual for Member Applying for the Geographical Indication Khao Hom Mali Thung Kula Rong-Hai.

Annex 2 – Registration certificate of Khao Hom Mali Thung Kula Rong-Hai as a Geographical Indication according to registration no. Sorchor 50100022 with English translation.

Annex 3 – Map depicting Geographical Area for Khao Hom Mali Thung Kula Rong-Hai.

Annex 4 - Legend of Khao Hom Mali Thung Kula Rong-Hai of the World.

Annex 5 - Regulation of Thung Kula Rong-Hai Geographical Indicator of Thai Hom Mali Rice Trader Association T-GIRA.

Annex 6 - Geographical Indication Act of Thailand

Annex 7 - Thai Khao Hom Mali Standards

Annex 8 - Control Plan Geographical Indication Khao Hom Mali Thung Kula Rong-Hai Annex 9 – Certificate for the producers and the processors

Annex 10 - Labels of Khao Hom Mali Thung Kula Rong-Hai