

## Style of Pottery Products of Ban Tao Hai in Phitsanulok Province

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### Abstract

The objective of this research was to investigate the history and analyze the style of pottery products of Ban Tao Hai in Phitsanulok province. The research procedure took on documentary study appeared with the stories of pottery products of Ban Tao Hai, and explore pottery products of Ban Tao Hai in the museums and those discovered in Phitsanulok province. Data analysis focused on the history, styles, decorative patterns, and marks or symbols observed. Research result demonstrated that the pottery products of Ban Tao Hai were located in the ancient kiln sites at Ban Tao Hai currently situated in the area of Ta Pakao Hai temple and Ta Pakao Hai school at Hua Raw sub-district, Amphur Muang, Phitsanulok province. It is a cluster of large kilns stacked up and lined up along the Nan River, the kilns with high-technology. The products were either earthenware or large stoneware such as jars, jugs, basins, and bowls. According to the survey and excavation on 2 April 1984 by the regional Office of Fine Arts of Sukhothai and Phitsanulok, a stack of 2 kilns was discovered, i.e. the brick-built crossdraft kilns in similar sizes called Phitsanulok Kiln 1 (PK.1) and Phitsanulok Kiln 2 (PK.2). Ban Tao Hai pottery products that the researcher found were kept in the museum and in the community, altogether 80 pieces. Most of them were not in perfect condition, and only some with perfect condition were in good storage. These 80 pieces were in 6 categories: 1) wide-mouth jar, 16 pieces; 2) flaring-mouth jar, 17 pieces; 3) basin, 2 pieces; 4) round-bottom pot, 3 pieces; 5) jarlet, 33 pieces; and 6) mortar, 9 pieces. Among them, 17 pieces were decorated with applied spiral design (Lai Kod Hoi) so called “Lai Ou”, 27 pieces with excised and impressed designs, and another 36 pieces were undecorated. They comprised 26 glazed and 54 unglazed pieces. One of the unique features of Ban Tao Hai pottery was the marks or symbols made by the potters on the body of workpieces. The study revealed 22 marked and 54 unmarked pieces of pottery.

**Keywords:** style, Pottery, Ban Tao Hai, Phitsanulok province

### 1. Introduction

Wisdom provides the root of the unique Thai-ness that represents nationhood and serves as an important tool to the development of the nation. Applying wisdom to local development thus effectively reinforces and strengthens the nation. The term local wisdom has been widely used in the society by both the public and private sectors. The term also overlaps with some other terms such as local knowledge, villager wisdom, popular wisdom, folk knowledge (Princess Maha Chakri Sirindhorn Anthropology Centre, 2005). Arts and archaeology are considered types of local wisdom that refer to something created by human for aesthetic purpose that offers psychological value of beauty or functionality, and to communicate the belief particular group of people, which include such as painting, sculpture, architecture, handicrafts, and archaeology (Choibamroong, 2011). Pottery signifies Thai local wisdom which has long been produced since the ancient time and became another type of the object well representing archaeological evidence. Thai pottery with its uniqueness can be observed in such as Sangkhalok wares from the kiln sites in Sukhothai period with supported evidence as exported goods during that time. Thai pottery also told stories and lifestyles of people who possessed them in each period (Hongwiwat, 2011). Phitsanulok is an important provincial center for transportation in lower northern Thailand. It also serves as the center of Indochina Intersection development zone, with tourism potentiality for its diversity of natural, historical, and cultural sites (Phitsanulok Office of Provincial Development, 2014). Moreover, Phitsanulok houses a number of significant kiln sites of the past, one is known as Ban Tao Hai situated on the east bank of

Nan river, at Hua Raw sub-district, Amphur Muang, Phitsanulok province, which is now called Ta Pakao Hai Temple. The archaeological excavation by the Department of Fine Art in 1984 revealed that Ban Tao Hai was a large industrial site (Jaemkhuntian, 1993). The prominent feature of Ban Tao Hai stoneware vessels is in the clay with well-preparing process. The most common vessels found were wide-mouth jars with ring-shape lugs, followed by flaring-mouth jars or flaring-mouth pots. All of them were made by wheel throwing. The unglazed pieces were decorated with beautiful applied design called “Lai Ou” by forming the clay into thin thread coiled in spiral shape on one end and applying around the jar’s neck and shoulder. Besides, the potter’s marks or symbols were also found on the work pieces of pottery to represent something. There were as many as 137 pictorial marks altogether found and the dominant ones were the pictures of deer in a circle, sword, leave, and cross in a circle. They may represent the potters or manufacturing sites which make them very interesting since the patterns on Thai pottery made by other sites were all for aesthetic purpose not as trademarks or manufacturer marks (Sangkhanukit, 2002). Today, the community people in Ta Pakhao Hai, local organizations, and educational organizations focus on the preservation and development of these artistic and cultural kiln sites at Ban Tao Hai to be widely known as tourist spot and as the learning sites of community. In the researcher’s view, the precise investigation on such as the history, origin, shape, and style of decoration and pattern are very important as they offer evidences on the community’s body of knowledge with respect to Ban Tao Hai pottery.

The researcher therefore conducted this research to explore the styles of pottery products of Ban Tao Hai in Phitsanulok province through the analysis of history, styles of pottery, decorative patterns and marks on the products so as to suggest guidelines for further development of creative process and styles of Ban Tao Hai pottery products of Phitsanulok. This will promote the artistic and cultural preservation and sustainment of Ban Tao Hai pottery which had been prospered in the past.

## **2. Research Objective**

To investigate the history and analyze the styles of pottery products of Ban Tao Hai, at Hua Raw sub-district, Amphur Muang, Phitsanulok province.

## **3. Research Scope**

This research explored the history and styles of Ban Tao Hai pottery by means of investigating the following documents, evidences, and the work pieces of antiques to obtain relevant information.

1 Evidences as documentary and printed materials

(1) Report documents on the Fine Art Department’s excavation in 1984.

(2) Printed materials appeared with the stories of Ban Tao Hai pottery and the documents discovered in Phitsanulok province.

2 Evidences investigated from the original pieces of Ban Tao Hai pottery which comprised

(1) Ban Tao Hai pottery pieces in the national museum (central storage) at Klong Ha sub-district, Klong Luang district, Pathumthani province.

(2) Ban Tao Hai pottery pieces in Phitsanulok province.

## **4. Research Procedure**

In the investigation of pottery products of Ban Tao Hai, Hua Raw sub-district, Amphur Muang, Phitsanulok province to capture information on the history and styles of pottery products, the researcher implemented the research steps described below.

1 Investigating the report documents of the Fine Art Department on the excavation in 1984, printed materials appeared with the stories of Ban Tao Hai pottery and the documents discovered in Phitsanulok province.

2 Examining the pieces of pottery products of Ban Tao Hai in the national museum, and those in the local museum of Ban Jatawee and in Ta Pakao Hai temple, as well as those discovered in Phitsanulok province.

3 Taking photographs, measuring for width and height of the discovered pottery pieces, decorative patterns, marks on the pieces, and making notes.

4 Analyzing and categorizing the obtained information to identify the history, styles, decorative patterns and marks on pottery pieces.

## **5. Research Result**

In conducting this research, the researcher undertook the field visits in person to collect the data starting from the documentary search to the interviews and inquiries about the history with local sages, local community people,

and older people. The following information on Ban tao Hai pottery was obtained and the summary result of analysis was presented in 6 parts.

#### Part 1 History of Ban Tao Hai pottery

Ban Tao Hai pottery products were found in the ancient kiln sites of Ban Tao Hai currently in the complex of Ta Pakao Hai and Ta Pakao Hai school at Hua raw sub-district, Amphur Muang, Phitsanulok province. It was a large group of kilns stacked up and lined up along the bank of Nan river. They were with high technology. The products manufactured here comprised both the earthenware and large sized stoneware such as jugs, jars, basins, bowls (Industrial Finance Corporation of Thailand, 1995). The Third Regional Office of the Fine Art Department of Sukhothai, and Phitsanuloke had surveyed the kiln wrecks and discovered about 40 - 50 kilns or may be as many as 100 kilns. The excavation on 2 April 1984 (Sangkhanukit, 2002) at the deepest level of 3.5 meters found a stack of 2 kilns. They were the brick-built crossdraft kilns in similar sizes and were called Phitsanulok kiln 1 (PK.1) and Phitsanulok kiln 2 (PK.2). The excavation revealed as many as 140,000 pieces of antiques discovered. The kilns were in general shape similarly to those found in Sukhothai and Si Sachanalai. Almost every part of the kiln inner wall looked like brown-glaze as a result of melting brick surface due to high temperature mixed with the blown wood ashes that formed the glaze. Most of the earthenware was discovered in the accumulated soil horizons, while most of the stoneware was found in the subgrade soil horizon, i.e. with the working kilns. Most of the earthenware pieces were tall-shaped jars, round-bottomed pots, wide-mouthed jars, decorated with impressed or paddle-stamped designs in many styles either only on the neck, from the body to the neck, or all over the work piece. The discovered stoneware pieces were in different sizes from small one of 3-4 cm. in diameter to the large one of 80 cm. tall. The most common pottery pieces found were wide-mouthed jars with ring-shaped lugs, followed by flaring-mouthed jars or flaring-mouthed pots, all were made by wheel-throwing. The decoration included such as applied spiral design, excised designs, paddle-impressed or stamped designs. Mortars were also commonly found in a variety of styles (Sangkhanukit, 2002). For stoneware, the clay used were from fine preparing process, and after burning it turned gray and red-purple. Some of these pieces were brown slipped. Most of them were made as food jars. The vases were in similar style as those produced at Koh Noi, i.e. with unglazed neck, and "Lai Ou" on the shoulder. Large unglazed vases were decorated with impressed designs as found in those of Suphunburi province (Shaw, 1993).



Figure 1. The shelter covering the kilns (left) and under it, the shape of the kiln (right)

Another distinctive characteristic of Ban Tao Hai pottery was potter's marks or symbols on the workpieces that signify something. The marks appeared were altogether 137 designs: 103 on stoneware and 34 on earthenware vessels. These marks can be categorized by the tools used including 56 marks by impression or stamping with designed paddles, 26 marks by excising tools, and another 55 marks were all made by fingers and nails. The impressed or paddle-stamped designs were most common in geometric, globular, triangular, and rectangular shapes, and the dominant pictorial designs were deer in a circle, sword, leave, cross in a circle. Other designs were stars, and overlapping circles which possibly represent the rowel or the sun. It was observed that these vessels were made from the same kiln site, with the same potter and the same type of clay. The patterns and marks found may refer to the potters or the manufacturing sites from which the products were sent to the kilns in the same neighborhood. Considering the globular shaped seal, it looked similar to the design in silver photduang coins in the Ayutthaya period, and some looked like those designs by Chinese and Japanese potters though not that clear. The leave, deer, wheel or rowel designs may come from Buddhist belief. The marks representing potters or manufacturing sites or trademarks were very interesting since all those patterns on Thai pottery

products manufactured in other sites were intended for aesthetic purpose not as trademarks or for manufacturing sites as obvious as in here (Sangkhanukit, 2545). At present, these ancient kilns were covered under the shelter built by the Fine Art Department to protect them from the damage by nature as in Figure 1.

#### Part 2 The number of discovered pottery pieces of Ban Tao Hai

The researcher found altogether 80 pieces of Ban Tao Hai pottery and most of them were not in complete shape but chipped and damaged and some were only in fragments. Some of them were in complete shape and in good storage by the possessors. These workpieces can be divided by 7 storage sites and possessors as follows.

1. Wat Ta Pakao Hai, Hua Raw sub-district, Amphur Muang, Phitsanulok province, 36 pieces or 45%.
2. Ta Pakao Hai School, Hua Raw sub-district, Amphur Muang, Phitsanulok province, 9 pieces or 11.25%.
3. National Museum (Central Storage), Klong Ha sub-district, Klong Luang district, Pathumthani province, 1 piece or 1.25%.
4. Folk museum Ja Tawee at 26/138, Wisutkasat Road, Amphur Muang, Phitsanulok province, 6 pieces or 7.50%.
5. Ceramics Department, Faculty of Industrial Technology, Pibulsongkram Rajabhat University, Plaichumpol sub-district, Amphur Maung, Phitsanulok province, 12 pieces or 15.00%.
6. Instructor Sa-Ing – instructor Bang-Orn Footem, 297 Moo 5, Ratsathatham Road, Hua Raw sub-district, Amphur Muang, Phitsanulok province, 12 pieces or 15%.
7. Acting second lieutenant Pornchai Chunha, Chief of Welfare Promotion, Hua Raw Sub-District Municipality, Amphur Muang, Phitsanulok province, 4 pieces or 5%.

#### Part 3 Styles of Ban Tao Hai pottery

The investigation of Ban Tao Hai pottery products revealed 6 styles of the workpieces: 1) wide-mouth jar, 16 pieces or 20%, 2) flaring-mouth jar, 17 pieces or 21.25%, 3) basin, 2 pieces or 2.5%, 4) round-bottom pot, 3 pieces or 3.75%, 5) jarlet, 33 pieces or 41.25%, and 6) mortar, 9 pieces or 11.25%. Examples of the workpieces in each style were displayed in Figures 2-7.



Figure 2. Wide-mouthed jar with lugs



Figure 3. Flaring-mouthed jar



Figure 4. Basins



Figure 5. Rounded bottom pots







Figure 6. Jarlets

Figure 7. Mortars

#### Part 4 Decorative patterns on pottery products of Ban Tao Hai

Ban Tao Hai pottery products found were either decorated or undecorated. The decorated ones were applied with many patterns on one workpiece such as spiral design called “Lai Ou”, excised and impressed designs. The spiral design found was in 2 styles: inward spiral as in Figure 8, and outward spiral as in Figure 9. Based on the investigation, the summary of decorative patterns on the pottery products is as follows: 1) applied, excised and impressed designs, 17 pieces or 21.25%; incised and impressed designs, 27 pieces or 33.75%; and undecorated, 36 pieces or 45%. Examples of pottery products with each of the above decorative patterns were shown in Figures 10 and 11, and those without decorative pattern were in Figure 12.



Figure 8. Applied design “lai Ou” with inward spirals



Figure 9. Applied design “lai Ou” with outward spirals

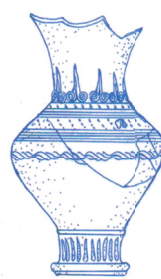


Figure 10. Flaring-mouthed jar decorated with applied design, excised and paddle-impressed designs



Figure 11. Round-bottomed pot decorated with incised and paddle-impressed designs



Figure 12. Small jarlets without decorative pattern

#### Part 5 Glazes on pottery products of Ban Tao Hai

According to the investigation of Ban Tao Hai pottery products, there were 26 glazed pieces or 32.50 % and 54 unglazed pieces or 67.50 %. The examples of glazed pieces were shown in Figure 13, and unglazed pieces in Figure 14.



Figure 13. Glazed pieces of Ban Tao Hai pottery products



Figure 14. Unglazed pieces of Ban Tao Hai pottery products

#### Part 6 Marks on pottery products of Ban Tao Hai

The distinctive feature on the discovered pieces of Ban Tao Hai pottery was the potter's marks in a range of designs such as those made by impression with seals, excision, and impression with fingernails. Exploring of the pottery pieces suggested that 22 pieces or 27.50 % were with marks, and 58 pieces or 72.50 % were without marks. Figures 15 – 17 presented the examples of different marks on pottery products of Ban Tao Hai



Figure 15. Seal-impressed marks on the pottery products of Ban Tao Hai

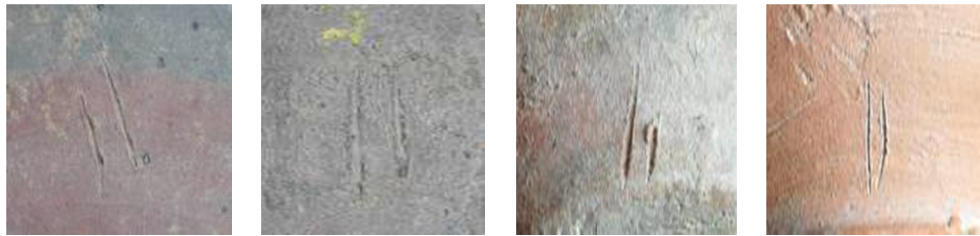


Figure 16. Excised marks on the pottery products of Ban Tao Hai

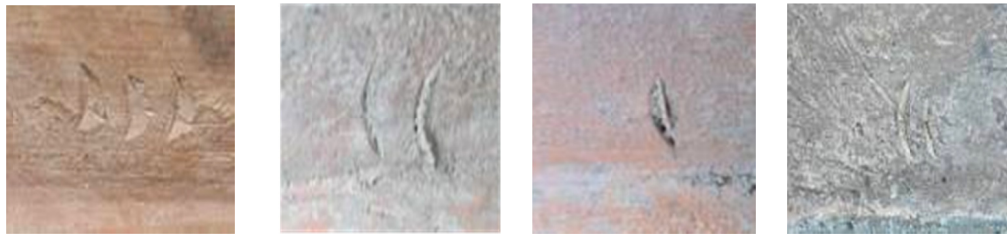


Figure 15. Fingernail-impressed marks on the pottery products of Ban Tao Hai

## 6. Discussion

Based on the analysis, the researcher discussed the results in the following 6 parts.

### Part 1 History of Ban Tao Hai pottery

The pottery products discovered were at the ancient kilns of Ban Tao Hai currently in the complex of Ta Pakao Hai temple and Ta Pakao Hai school, in Hua Raw sub-district, Amphur Muang, Phitsanulok province. The Third Regional Office of the Arts Department Sukhothai and Phitsanuloke provinces had surveyed the kiln ruins and found about 40-50 kilns or may be as many as 100 kilns, and the excavation was conducted on 2 April 1984. (Sangkhanukit, 2002) The researcher's opinion agreed to those of the academicians who surveyed the kiln sites and expected there were many kilns around this area. During the researcher's field visit to survey and interview with many local community people, it was observed that a large number of pottery fragments and the debris of the kiln bricks were there at the bank of Nan river. The Fine Art Department's excavation discovered a stack of 2 kilns, brick-built crossdraft kilns in similar sizes, called as Phitsanulok kiln 1 PK.1) and Phitsanulok kiln 2 (PK.2). Moreover, as many as 140,000 pieces of antiques were also found. At present, these ancient kilns were covered under the shelter built by the Fine Art Department to prevent them from the damage by nature. Ban Tao Hai kilns were in a group of large kilns with high technology. The pottery produced here were both the earthenware and stoneware. The earthenware included tall cylinder-shaped jars, round bottom pot, wide-mouthed jar, and decorated with impressed or stamped patterns. The most common stoneware included wide-mouthed jars with ring-shaped lugs, followed by flaring-mouthed jars or pots decorated with applied spiral design, excised, impressed or stamped designs. Another type of vessel commonly found was mortar in a range of designs and styles (Sangkhanukit, 2002) As the academicians' excavation revealed, there were a lot of mortars in a range of styles and sizes, as the mortar is a kitchen utensil traditionally used by Thai people since the ancient time and is still in use in many households in the present-day. The researcher believed that at this Ban Tao Hai kiln site, the mortars were produced for the use in large community or for selling in other communities. Similarly to those academicians, the researcher investigated and found mortars in a variety of styles and sizes and assumed that they may be made by many potters in this kiln site. For the discovered stoneware, the clay used were from fine process of preparation, and they turned gray and red purple from burning. Some of stoneware vessels were brown glazed. Most of them were made as jars for food. The vases were in the same style as those produced at Koh Noi, i.e. with unglazed neck, and "Lai Ou" design on the vase shoulder (Shaw, 1993). It was found that Lai Ou decoration on the pottery products investigated by the researcher appeared only on the flaring-mouthed jars but not on other styles of products. In view of the researcher, it was expected that flaring-mouthed jar would be expensive in the ancient time or used among the royalty or possibly used in relation to rituals and belief. This would require further investigation for evidence in the future. Another distinctive feature of Ban Tao Hai pottery was the potter's marks or symbols that signify something. As found by academicians, there were altogether 137 designs of marks. The most common design was picture contained in geometric forms like circle, triangle, and



rectangle. The most visible pictorial mark and mostly found was deer in a circle, sword, leave, and cross in a circle. The deer mark and wheel or rowel marks may come from Buddhist belief. The researcher agreed to Prachote Sangkhanukit (2002) who noted that the motif or personal mark or manufacturer mark may be the trademarks. It may be possible since the patterns on Thai pottery products at other sites were all made for aesthetic purpose not as trademark or for manufacturing site as evident at this Ban Tao Hai site. Moreover, many patterns or marks discovered by academicians as well as by the researcher in this research should provide evidences to support that this pottery manufacturing site at Ban Tao Hai certainly once was a large industrious site in the past.

Part 2 The pottery products of Ban Tao Hai discovered by the researcher were totally 80 pieces and most of them were not in perfect condition but nicked and damaged and some were only in fragments of the workpieces. However, some of them were in perfect condition and in good storage by the possessors. Most of them, i.e. 36 pieces were under the possession of Ta Pakao Hai temple. The reason many pieces of pottery products were found here because they were collected and in good care of the temple's abbot and monks as the temple is the center where community people gathered and it covers a large area including the ancient kiln site of Ban Tao Hai on the east bank of Nan river in Phisanulok province. (Thampridakorn & Pinsri, 1990) People who picked up the pottery pieces usually handed them to the temple for educational purpose by successive generations. Besides, people here believed in the sacred things in the temple so they dare not to keep these workpieces at home.

Part 3 Styles of Ban Tao Hai pottery. The current study suggested the style of Ban Tao Hai pottery in 6 categories: 1) large-mouthed jar; 2) flaring mouthed jar; 3) basin; 4) round bottomed pot; 5) jarlet; and 6) mortar. Among these pottery pieces, the most common were jarlets for as many as 33 pieces or 41.25 %, and the least common were basins for only 2 pieces or 2.50 %. All of these 6 categories of pottery discovered by the researcher corresponded to the pottery styles reported by Hein, Don and Sangkhanukit, Prachote, (1987) in their excavation on 2 April 1984, and also agreed to the Fine Art Department (2009) indicating that the major workpieces of stoneware found at this kiln site were jars, basins, and mortars.

Part 4 Decorative patterns on pottery products of Ban Tao Hai. As reported, Ban Tao Hai pottery included the workpieces both with and without decorative patterns. The decorated ones displayed a combination of different designs on one piece. For example, flaring-mouthed jars were decorated with applied spiral design called "Lai Ou", along with excised and paddle-impressed designs. Some of the pottery pieces such as round-bottomed pots were with excised or paddle-impressed designs. This investigation was consistent with John Shaw's (1993) suggesting that among the pottery products of Ban Tao Hai, the earthenware were decorated with rough incised patterns or impressed patterns, while most of the stoneware products were made as food jars with "Lai Ou" decoration on the shoulder.

Part 5 Glazes on pottery products of Ban Tao Hai. The study found either glazed or unglazed pottery products of Ban Tao Hai. Out of the total 80 pieces discovered, the glazed ones comprised 26 pieces or 32.5 % of flaring-mouthed jars and small jarlets, with brown to black glazes. The unglazed ones were such as wide-mouthed jars, basins, and mortars for 54 pieces or 67.50 %. These agreed to Prachote Sangkhanukij (2002) reported that some of the stoneware pottery products of Ban Tao Hai were glazed in black and gloomy olive colors.

Part 6 Marks on pottery products of Ban Tao Hai. Another unique feature of Ban Tao Hai pottery was the potter's marks or symbols on the bodies of work pieces. The investigation revealed that the marks appeared on 22 pottery pieces or 27.50 % of all pieces. These marks included seal-impressed, fingernail-impressed, and linear excised designs, for example. Regarding the representation of these marks or symbols on the discovered pottery workpieces, the researcher shared the view with those academicians, Hein, Don and Sangkhanukit, Prachote (1987) proposing that marks on pottery products may communicate the Buddhist belief. These potter's personal marks or possibly the trademarks are very interesting since the decorative patterns on pottery products made by other manufacturing sites were all aesthetic intended but not as trademarks or represented manufacturing sites as evident at Ban Tao Hai pottery site.

## 7. Conclusions

Based on this investigation of history and styles of pottery products of Ban Tao Hai, it was found that Ban Tao Hai pottery products were discovered at the ancient kiln of Ban Tao Hai currently located within the complex of Ta Pakao Hai temple and Ta Pakao Hai school, Hua Raw sub-district, Amphur Muang, Phitsanulok province. The researcher found 80 pieces of pottery which were kept at different places such as temple, school, museum, and by community people. The style of discovered were in 6 categories, i.e. wide-mouthed jar, flaring-mouthed jar, basin, round-bottomed pot, jarlet, and mortar. The decoration on the products included applied spiral-shaped



design or so called “Lai Ou”, excised and paddle-impressed designs, all were in the same piece of products, while some were without decoration. Most of the workpieces were unglazed, and some were glazed in brown to black colors. Another prominent feature on Ban Tao Hai pottery products were a range of marks or symbols made by the potters. The marks appeared on 22 workpieces which are very interesting and should be further explored in the future research.

### 8. Recommendations

1. It should explore and develop a contemporary style of pottery with applied wisdom of original work pieces so as to sustain its uniqueness of Phitsanulok province.
2. It should explore the clay body and glazes used in manufacturing pottery products of Ban Tao Hai.
3. It should explore the designs and development of other products by applying the uniqueness of Ban Tao Hai kiln site.
4. It should also explore the marks and their representations on the workpieces of Ban Tao Hai pottery products.

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