**CHAPTER V**

**SUMMARY, CONCLUSION, AND RECOMMENDATION**

**Summary of Findings**

The main objective of the study was to determine the feasibility of mussel and clam shells in plate production in terms of texture, presentability and durability by comparing the results with plates without any additives. This study tried to test if mussel shells will be used in plate production, then the plates will have better quality in terms of texture, presentability and durability. Another goal of the research was to further continue the findings of another study, *Strength of Cement with Halaan and Tahong Shells: A Comparative Study* by Apales K., del Valle L., Samoza R.P., Veluz E. (2011), which was the basis and in truth the origin of this study, *The Feasibility of Mussel and Clam Shells in Plate Production: A Comparative Study*. In the previous research, the group yeilded the result that the blocks with halaan or clam shells were more durable than the blocks with mussel shells, although, in the study, the most durable was still the cement block without additives. In this study, the researchers in some way heightened the study’s scope by using the shells in plates and widened the horizons of the discoveries this research could pursue by testing not only durability but presentability and texture too.

In this study, the researchers answered the specific questions regarding the plates’ qualities and their feasibility overall. They answered the following questions:

1. What is the subject’s profile in terms of:

a. texture

b. presentability

c. durability

The researcher’s observed that the three subjects had largely varying profile’s in terms of texture, presentability and durability. The plate’s of set-up A had moderately good qualities, while set-up B failed to enhance and quite possibly worsened the texture and presentability but enhanced durability. It was opposite with set-up C, which was good in texture and presentability but worst in durabilty.

2. Are the plates with mussel or clam shells better than the plates without any additives in terms of the qualities mentioned above?

The researchers can say that the plates with clam shells are better than the plates with no additives, but he same can not be said for the plates with mussel shells.

**Conclusion**

After all the data and information were thoroughly analyzed, the researchers came up with a synthesis. The researchers accepted that their hypothesis was proved wrong. The plates with mussel shells failed to enhance the plates’ quality. The researchers expected that both clam and mussel shells would be feasible in enhancing the plates produced but only the plates with clam shells yielded satisfactory results. The clam shells made the plates moderately smooth, although, compared to the plates without additives, it must be said that clam shells still slightly hinder the texture of a plate. But in presentability, the plates with clam shells were rated the highest average, indicating that clam shells do pose the ability to enhance the design of a plate. And as for durability, the clam shells also proved to enhance the plates’ strength significantly.

The researchers therefore conclude that clam shells are to some extent feasible in plate production.

**Recommendation**

Based on the findings and the conclusion, the following recommendations are advised:

\* Crush the shells, particularly the mussel shells, into a very fine powder form without any large pieves. A sieve with smaller holes is advised, although it will definitely take more time crushing the shells to get the very fine powdered form that is required.

\* Try a different kind of ceramics to form the plate. Plaster of Paris might not have been the best constituent to make the plate and trying other substances, like clay or cement, might help in enhancing the plate’s quality.

\* Use a real mold instead of a makeshift or alternative one like the researchers used in this study. Using a real mold actually made for plate production might enhance the plates’ texture and presentability. The makeshift mold in this study did not allow the plates to have a more polished or perfect form. It did not form the plates with enough quality and finesse, unlike a real mold for plate’s would do. Making another type of alternative mold might be possible, aside from the method used in this study, but the results might not be as good as using a real mold.

\* Approach and employ the service of a plate making business and make them produce the plates with mussel and clam shells. The plates’ they will produce will definitely be better than the homemade plates made in this study. Also, plates with mussel and clam shells produced by a real plate making business would have quality that could be compared to commercial plates with no seashell additives. This would widen the study’s scope even more.