

Table 12 Percent inhibition of Various Concentration of Sample

| Concentration (mg/ml) | Mean Absorbance | Mean % inhibition | IC ₅₀ (mg/ml) |
|--------------------------|--------------------|----------------------|-----------------------------|
| 100 | 0.244 | 62.34 | 66.48 |
| 75 | 0.261 | 59.77 | |
| 50 | 0.356 | 45.06 | |
| 25 | 0.486 | 25 | |

IC₅₀ value was calculated by using linear regressive equation.

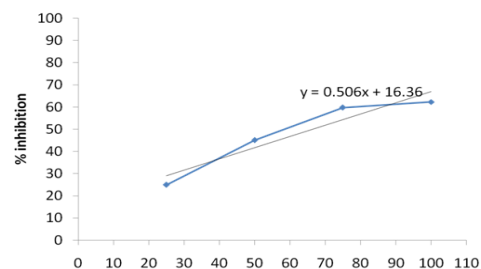


Figure-6 Plot of % Inhibition Vs
Concentration of Fruits of Lady Finger

According to this table, the antioxidant activity of fruits of Lady finger was determined in DPPH free radical scavenging assay. In DPPH screening assay, IC₅₀ value of fruits of Lady finger was found to be 66.48 mg/ml. It was very much higher than that of standard ascorbic acid (IC₅₀ 17.99 µg/ml). So, the sample extract has lower antioxidant activity than standard ascorbic acid.

4. CONCLUSION

The fruits of Lady finger was collected from Sintkaing Township, Mandalay Region. The phytochemical investigation of the fruits of *Hibiscus esculentus* Linn. was done. The fruits of Lady finger consists of alkaloids, flavonoids, steroid, terpene, polyphenol, glycoside, phenolic, tannins, saponin, carbohydrate, lipophenol and the absence of reducing sugar. The elemental contents of sample were determined by EDXRF method. The amount of potassium is the highest percent (2.409 %) in this sample. And other constituents of minerals are calcium, phosphorous, iron, zinc, manganese and copper. The proximal composition of the fruits of Lady finger such as ash (89 %), moisture (16 %), oil (0.53 %), nitrogen (0.6445 %), protein (4.028 %), carbohydrate (5.8 %) and fiber (9.5 %). The vitamin C content of the sample is 20.8 mg/100 g. Moreover, antimicrobial activity of the fruits of Lady finger in the solvent was also determined by agar well diffusion method on six selected organisms namely *Bacillus subtilis*, *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Bacillus pumilus*, *Candida albicans*, *E. coli*. Ethyl acetate extracts gives rise to no activity against all the organisms. And the hexane extract showed no activity. The antioxidant activity of the sample was determined at University of Mandalay. Percent inhibition of standard ascorbic acid and IC₅₀ value of ethanolic extract of the sample were determined by using DPPH. The IC₅₀ values of ethanolic extract of the sample was found to be 66.48 mg/ml. It was very much higher than that of standard ascorbic acid (IC₅₀ = 17.99 µg/ml). So, the sample extract has lower antioxidant activity than standard ascorbic acid. From the experimental data, the fruit of *Hibiscus esculentus* Linn. contains valuable chemical constituents and nutrients for human.

ACKNOWLEDGEMENTS

We would like to express our heartfelt gratitude to Rector, Dr Thida Win, University of Mandalay for her interest and encouragement on our research work. We also convey special gratitude to Dr Yi Yi Myint, Professor and Head, Department of Chemistry, University of Mandalay for her permission and facilities to do her patient guidance and invaluable advice. We deeply thank to Dr Khaing Khaing Kyu and Dr Lwin Mu Aung Professors, Department of Chemistry, University of Mandalay for her patient kind and invaluable advice during this research work.

REFERENCES

- [1] Dr. nonald R. Buhler, "Antioxidant Activities of Flavonoids" November, 2000.
- [2] Aparana Buzarbarua, Dr, "A Textbook of Practical Plant Chemistry" 1st Edition, 2000

Website

1. <https://en.m.wikipedia.org/wiki/Okra/>
2. <https://plantvillage.psu.edu/topics/.../infos>