and over the water bath. The residue with 5 mL of 2M HCl was stirred over a steam bath for about 2 minutes and was cooled then filtered and divided the filtrate into two portions. One portion was tested with the Dragendorff's reagent and then the other was tested with Mayer's reagent. The results obtained were recorded.

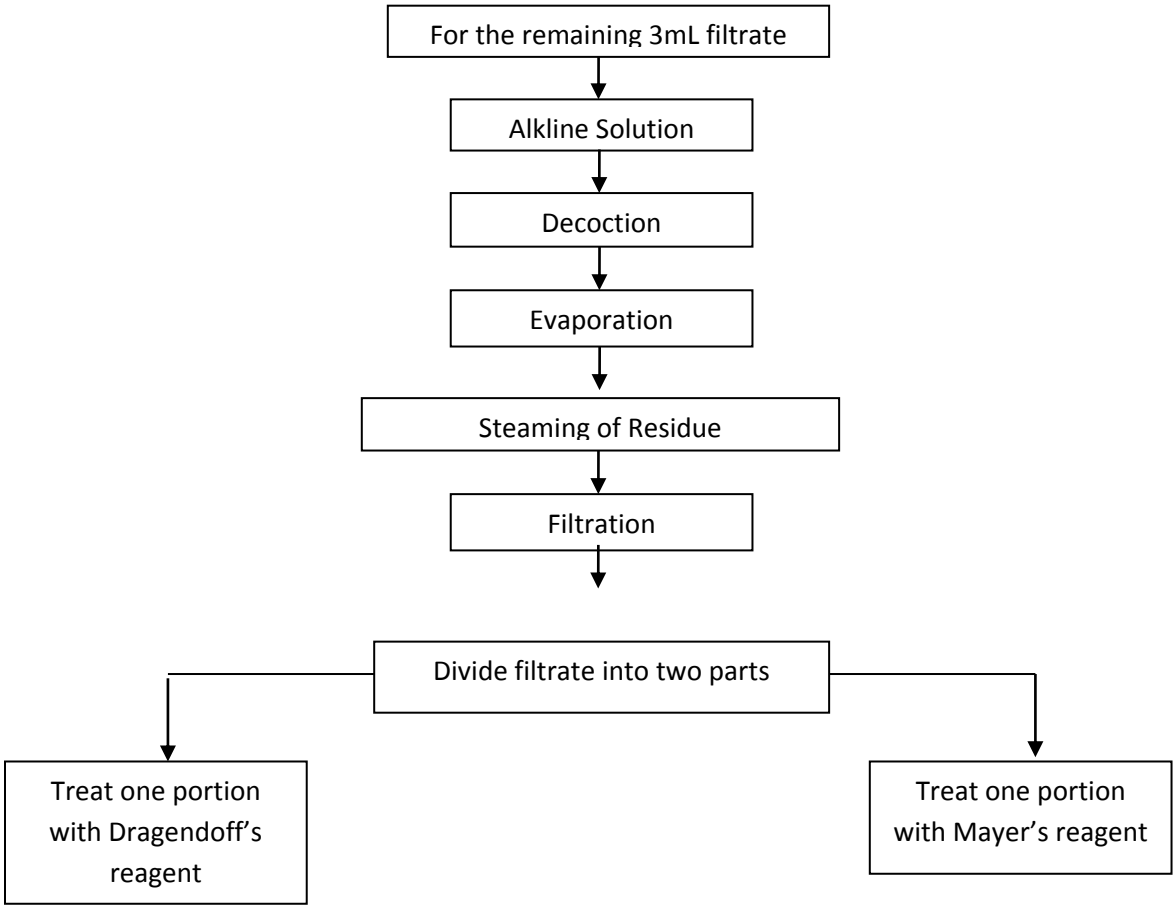

Figure 3. Confirmatory Test for Alkaloid

G. Test for the Presence of Triterpenes

The Libermann-Burchard was used to test for the presence of triterpene. A range of color from blue to green, red pink, purple, or violet indicates the presence of triterpene. This test was done by evaporating to incipient dryness over a steam bath the extract of 30g of Polipog. It was cooled to room temperature before defatting with 12 mL hexane and 6 mL water. The test tube was shaken gently and the upper hexane layer pipette out. This treatment with hexane was repeated until most of the colored pigments removed. The hexane was discarded properly. The aqueous layer was treated with 10 mL chloroform extract pipette out. The chloroform extract was dried by filtering through about 100 mg anhydrous solution of sodium sulfate held over the dry filter paper. The filtrate was divided into two (2) portions. One portion was used as control. The other portion was treated with three (3) drop of acetic anhydride and the one (1) drop of concentrated sulfuric acid. It was observed for any immediate color change. It set aside for an hour and observed for further color changes. It was compared with the control and the result was recorded.

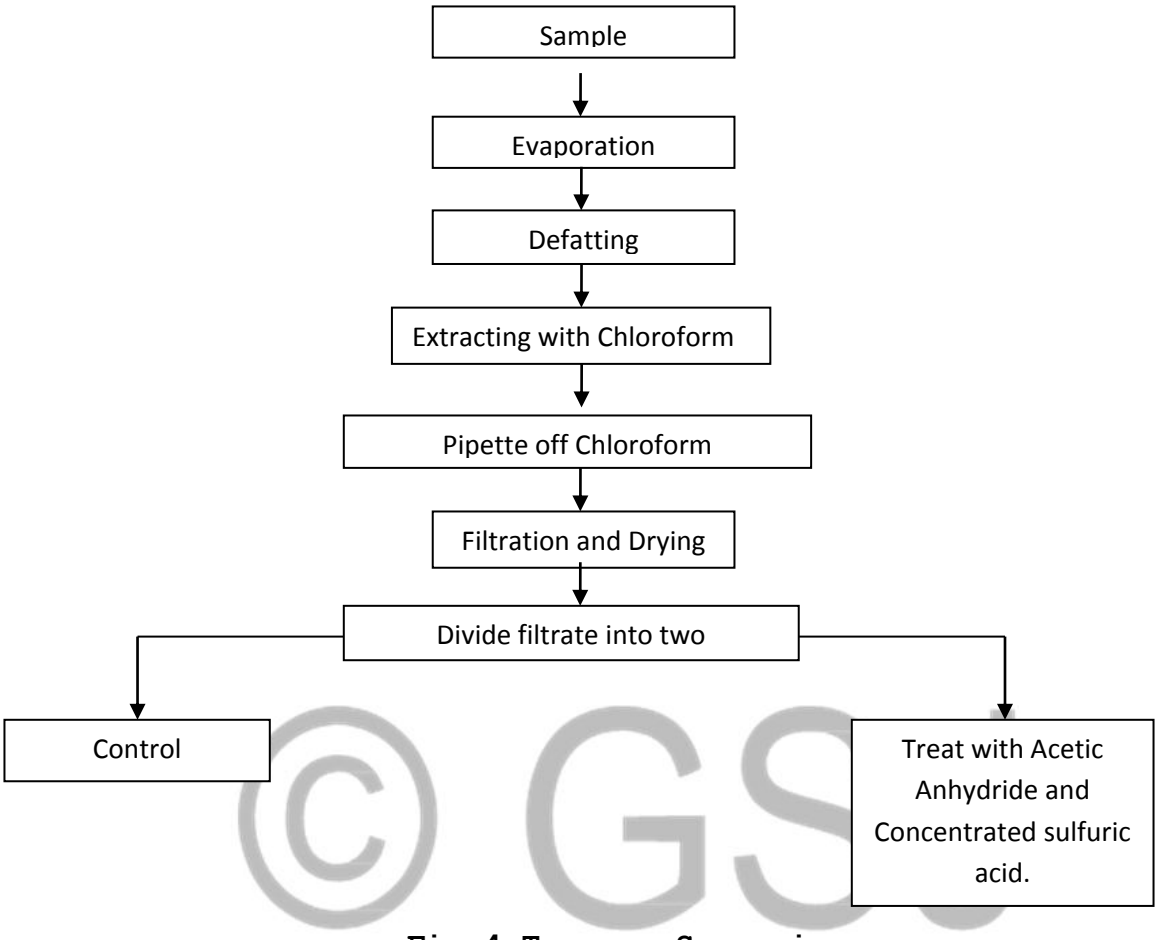

Fig.4 Terpene Screening

H. Test for Presence of ∞- benzopyrene (Flavonoid)

Wilstatter "cyaniding" test was used to detect the presence of this compound. Colors ranging from orange to red, to crimson and magenta and occasionally, to green or blue may be observed. Another portion of alcohol filtrate was taken and treated separately with 0.5 mL concentrated hydrochloric acid (12M). A 3-4 pieces of about 1 cm of magnesium ribbon was added and the change of color was observed after 10 minutes. It was

compared with the control tube. An equal volume of water and 1 mL octyl alcohol was added when definite coloration occurred. It was shaken and was allowed to stand. The color in each layer was noted and the result was recorded.

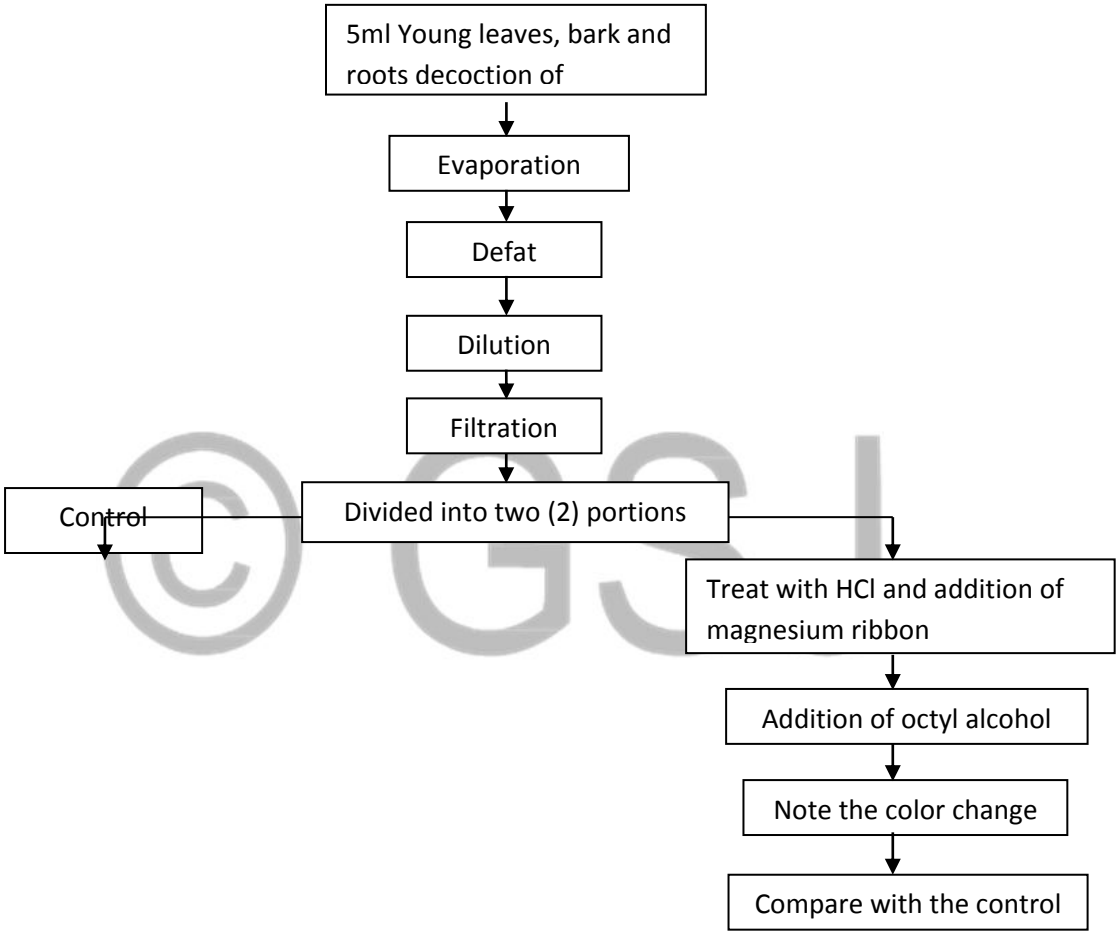

Figure 4. ∞-benzopyrene Screening

Results and Discussions

The Physical properties under studies shows that the Polipog Leaves has intense green color. On the other hand Polipog barks has yellow orange color, and each roots has red

orange color, However the leaves has unpleasant odor while bark and roots have pleasant odor. As far as pH of Polipog leaves is concerned based on the result of the three trials, Polipog leaves and barks have a mean pH of 6.0 and Polipog roots has 7.0 which means that the decoction of leaves and barks are slightly acidic while the roots decoction is neutral .

In terms of comparison of density between trials 1-3 of Polipog leaves, barks and roots, the decoction of leaves has a mean density of 0.86. Moreover the decoction of barks and roots have densities a mean of 0.96 and 0.86 rspectively. It implies that the Polipog barks decoction is denser compare to the decoction of leaves and roots.

The young leaves , barks and roots are immiscible(Non-polar) in benzene, oil and choloroform but miscible(Polar) in water. This implies that “like dissolve like” that only polar liquid solute can dissolve in polar lquid solvent.

Furthermore, the boiling point of the three samples (young leaves, barks and roots of Polipog decoction has a mean boiling point of 47.67 °C, 52.3 °C and 56 °C, respectively.

Moreover, findings showed that among the secondary metabolites, triterpene and flavonoid were present in the decoction of leaves, bark and roots however alkaloid metabolite was not evident.

Conclusions

Based on the findings of this study, the researcher arrived at the following conclusions:

1.) Triterpene and (flavonoid) ∞-benzopyrene are the present in the decoction of leaves, bark and roots of *Connarus semidecandrus* Jack plant gathered from San Juan, Mondragon Northern Samar. Therefore, based on the findings the research hypothesis is accepted that there is active component present in the decoction of Polipog leaves, bark, and roots.

2.) The secondary metabolite that was not positive in the leaves, bark and roots of Polipog in San Juan, Mondragon Northern Samar is the Alkaloid.

Recommendation

Based on the results and conclusions, the researcher recommends the following:

1) Test the Polipog for effects on other ailments and illness, like hyperchloresteremia (but using a large specimen).
2) Perform further study on secondary metabolites present using other method of screening to negate or affirm the present study.

BIBLIOGRAPHY

A. Books

Beatrice Q. Guevara A Guide to PLANT SCREENING (Phytochemical and Biological) Revised Edition. 2005, p 39.

Mc Graw-Hill Encyclopedia of Science and Technology. 1997

The New International Webster's Dictionary and Thesaurus Encyclopedia Edition. Trident Press International. 2000

B. Journals

Bato Balani For Science and Technology Vol.28.2009

Browder, S.E. The Health Booster. The Readers Digest. April 2000

C. Unpublished Thesis

Castillo, Allan E. "Isolation and Characterization of Tacophenol from Allium Sativum (Garlic)"

Echano, Reneiza. "Phytochemical Screening of Jathropa Multifida Linn. (Coral Plant) Leaves and Stem Extract."

Interior, Analene G. "Phytochemical Screening of Aegiceras corniculatum (saging-saging) seeds extract".

Mabutin, Angeline. "Phytochemical screening of *Jathroph curcas* (Tubang-bakod) seeds extract".

D. Other Sources

http://medinfo. PSU.ac.th/Annul Research/2000/rwan2.htm

www.isu-visca.edu.ph

http://en.wikipedia.org/wiki/Alkaloid

www.tradekey.com/producy_view/id/658196.htm

www.eziнearticles.com/Diabetes-News-Use-Flavonoids-for-Diabetic-complication&id-2818966

www.ncbi.nlm.nih.gov/pubmed/19429317