

## Chemical Bonding Character of Love Herbal Medicine: A Prominent Medicine Candidate for Preventing HIV Virus

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### ABSTRACT

*Anti-oxidant with a very high concentration of IC<sub>50</sub> = 6.54 ng/ml extracted from zingiberaceae fruit (Halmahera Golobe) had made this local fruit a very good candidate for improving human health. Based on this finding, a medicine named as love herbal had been fabricated with a multitasking healing in human body problems. In order to analyze the physical working system of this medicine, one investigated the optical properties of it by using chemical bonding spectroscopy method. We obtain that such medicine has optical uniqueness behaviors contributed by 4 main types of chemical bonds named as N-H (Bending) at 1562 cm<sup>-1</sup>, C=C at 1697 cm<sup>-1</sup>, C C at 2070 cm<sup>-1</sup>, and C-H at 3013 cm<sup>-1</sup> which might be closely in conjunction with multitasking healing of human body problems, for example in improving antibody protection of human body from cancer deceases, viruses problems, and the health of heart and liver. Such finding was then tested for handling HIV virus as a result with a new discovery that such virus can be reduced dramatically from ~8 million virus to be just about ~8000 virus as the concentration of the medicine increased.*

### Keywords

Love herbal, Unique optical, Behavior, Multitasking, Anti-cancer.

### Introduction

Nanotechnology and nanomedicine are attractive fields linked one another due to their breakthrough in advancing healing of

human body problems attacked by various internal cell defects and external parasites problems especially to various disturbances in the DNA inside blood cells as well as human important organs such as heart, liver and lung [1,2]. These advantages applications are obviously associated with the effective treatment to various complicated patients through small amount of nanomedicine with

multitasking impacts of both physically and psychology healing in human deceases [3,4].

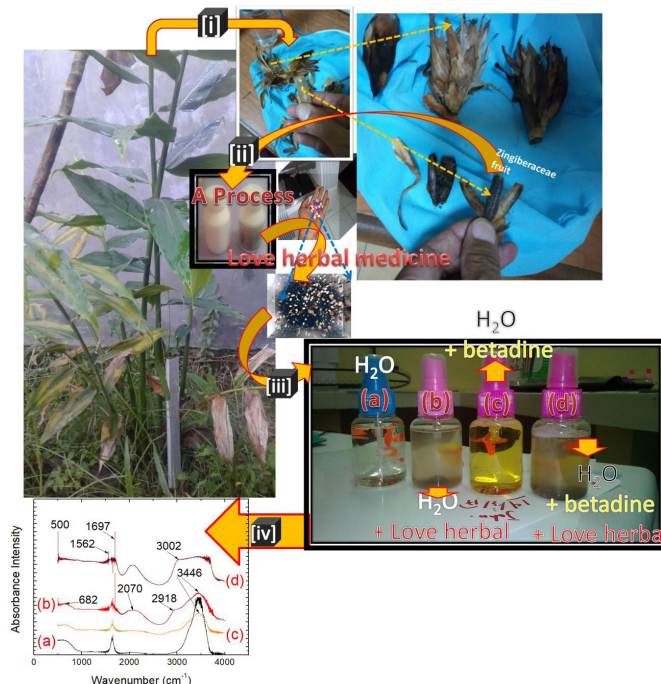
Based on our former multitasking collaborated research in many types of significant complex multidisciplinary herbal medicines [1-4] and nanotechnology research [5-19] as the applied nanoscience, the breakthrough of something novel was started by the changing of size and interactions of light-matters which automatically affected the structure, chemical behavior, and physical process of such mater system when it flows as well as interacts with other parties. The great challenge in developing new nanomedicine and its treatments into patients has still been ongoing investigation works by various interdisciplinary collaborative scientists. For example, one health problem with the largest victims which caused ~ 36 million people deaths worldwide is HIV (AIDS) virus attack in human body based on damaging DNA since it was found by R.C. Gallo, et al. in 1984 [20-23].

In present letter, the chemical bonding study of a medicine called as Love herbal extracted from zingiberaceae fruit (Halmahera Golobe) is reported due to its excellent medicine candidate for improving a multitasking human health. Based on our findings, the Love herbal medicine (LHM) has the highest antioxidant content among others medicines on earth so far, as well as its optical uniqueness behaviors contributed by 4 main types of chemical bondings named as N-H (Bending), C=C, C C, and C-H which might be closely associated with a multitasking healing of human body problems, for example in improving antibody protection of human body from cancer deceases, viruses problems, and another human organ problems. Moreover, our discovery to handling and stopping the growth of HIV virus using the LHM is comparable with Lamivudine (a world standard current HIV medicine invented on 17th November 1995) at low concentration. While it is interesting to point out that as the treatment was continued with higher concentration of the LHM (~ 8 times higher), the virus remained ~800 from 8 million HIV viruses.

### Experimental method

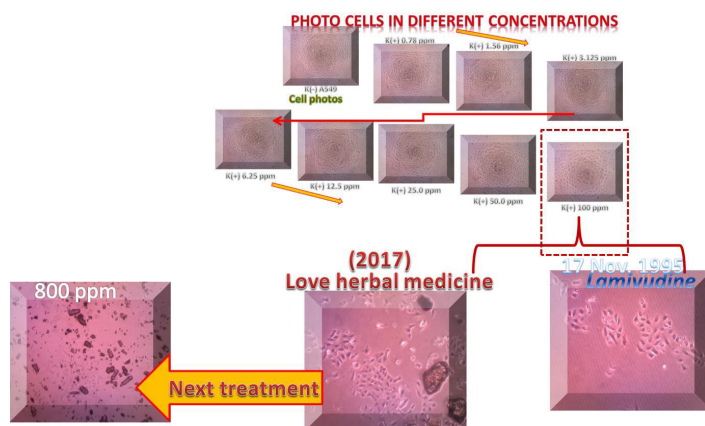
Figure 1 shows the chemical bonding spectroscopy closely associated with the physical picture of the herbal medicine in which all the samples in such figure were then taken by part as prepared to be investigated using a simple optical technique arranged in Fourier transform infrared (FTIR) spectrometer MB3000, USA. In order to effectively investigate the absorptive character of LHM fabricated using the extraction of Halmahera Golobe, we used the understanding knowledge of FTIR spectroscopy to examine the chemical significant inside LHM as depicted in Figure 1. The technique can be used to obtain the presence of damping or certain substance absorption due to a chemical vibration by a physical process [8,10,12,18] in a material including nanomedicine [4]. In this study, the base standard sample of a pure tape water with those of various types of samples which diluted in such tape water and betadine (a standard medicine for wound in Indonesia), one can identify whether there is a presence of a physical damping induced by some optical process in molecules or not in the LHM identified by the color changing in such mixture liquid exactly like the real

time photo taken in our experiment mentioned above.



**Figure 1:** The chemical bonds measurements of all fresh prepared samples consisted of (a) pure tape water, (b) a mixture between betadine and tape water, (c) a mixture between tape water and love herbal, and (d) a mixture between tape water and betadine with the presence of love herbal. The relationship between C-F and C-H bonds in love herbal is related to a very small C-F bonding peak at 1360  $\text{cm}^{-1}$  contributed by love herbal medicine.

In order to test our LHM extracted from the Halmahera Golobe, photo cells experiment was carried out in Premata IPB Laboratory, Bogor, West Java province, Indonesia in 2017 with the results of love herbal medicine compared with Lamivudine is shown in Figure 2. In the picture, at the beginning the photo cells of HIV virus was firstly calibrated for the comparison of the number of viruses. Furthermore, the two types of medicines of Lamivudine and LHM were treated to the target HIV viruses.



**Figure 2:** A comparison discovery between Lamivudine and LHM using photo cells data in preventing and handling the HIV virus.

## Results and Discussion

Based on the finding characterized using FTIR spectroscopy for the LHM detail chemical bonding closely related to its inner character in healing problem of human body shown in Figure 1, we can identify that there is a certain chemical bonding from LHM which significantly contributed to reduce a contaminated water due to betadine influence with an indicator of the physical color change in the presence of LHM. The main observed peaks of pure tape water from Pattimura university well are at  $614\text{ cm}^{-1}$ ,  $1652\text{ cm}^{-1}$  (N-H bending), and  $3457\text{ cm}^{-1}$  (O-H), respectively.

By adding betadine into such tape water, the O-H peak was decreased and the color of the water turns to be orange. On the other hand, when the LHM was interacted with the pure tape water there is a significant presence of C-H peak at  $2949\text{ cm}^{-1}$ , and C C at  $2070\text{ cm}^{-1}$ . Finally, in order to understand the contribution of love herbal with its reaction with a mixture of tape water and betadine, one observed additional peaks represented the chemical bonding of N-H (Bending) at  $1562\text{ cm}^{-1}$ , C=C at  $1697\text{ cm}^{-1}$ , and C C at  $2070\text{ cm}^{-1}$ . In addition, there is a little bit shifted in the position of C-H from  $2949\text{ cm}^{-1}$  to be  $3013\text{ cm}^{-1}$ . Such finding suggests that LHM high antioxidant content can be caused by the improvement of 4 main chemical bondings as follows N-H (Bending) at  $1562\text{ cm}^{-1}$ , C=C at  $1697\text{ cm}^{-1}$ , C C at  $2070\text{ cm}^{-1}$ , and C-H at  $3013\text{ cm}^{-1}$ . The C=C bonding at  $1697\text{ cm}^{-1}$  is strongly related to a strong carbon structure closely in conjunction with flavonoid in LHM [3], and its absorbance was slightly decreased in the presence of betadine. Such 4 main chemical bondings were in close relationships with multitasking healing of human body problems, for example in improving antibody protection of human body from cancer deceases, viruses problems, and the health of heart as well as another organ failures. Furthermore, even there is only a very small oscillation of C-F bonding peak at  $1360\text{ cm}^{-1}$  contributed by LHM as depicted in Figure 1, the C-H bonding was mainly influenced by such C-F bonding. Moreover, the presence of LHM in the tape water mixed with betadine created a higher peak of C C as well as the shift of C-H bonding from  $2949\text{ cm}^{-1}$  to be  $3013\text{ cm}^{-1}$ . While the LHM interactions with betadine in tape water made a little decrease of C=C at  $1697\text{ cm}^{-1}$ . This indicator suggests that a small C-F bonding peak at  $1360\text{ cm}^{-1}$  may have played an important rule to trigger the healing process in many types of human body problems.

In analyzing the application of LHM to prevent various dangerous viruses [24-29], Figure 2 shows medical and pharmaceutical tests via photo cells experiment using, for instance HIV virus which significantly indicated the dramatically reduction of HIV virus as the concentration of LHM was increased from 100 ppm to be 800 ppm. Furthermore, based on the comparison of this LHM and Lamivudine, the LHM is comparable with the Lamivudine. However, as the LHM healthy medicine with no side effects to human body due to its non-enzymatic anti-oxidant was enhanced about 8 times higher (800 ppm), more HIV viruses become removed from 8 million viruses to be just about 800 viruses. Therefore, our LHM is a newly discover prominent candidate medicine with no another side effects to remove HIV virus in human body because

of many reasons. The more HIV patient consumes LHM in a short time period, the more HIV virus will be disappeared, and finally, the patient will get healed. Such finding suggests that LHM with high antioxidant content and its unique chemical bonding behavior can be used to kill HIV long process virus problem in human body, including a cancer cell, of course with a further research.

## Conclusion

In summary, four typical chemical bondings of N-H (Bending) at  $1562\text{ cm}^{-1}$ , C=C at  $1697\text{ cm}^{-1}$ , C C at  $2070\text{ cm}^{-1}$ , and C-H at  $3013\text{ cm}^{-1}$ , respectively are responsible for the highest non-enzymatic antioxidant content in LHM as well as a multitasking healing medicine in human body including its superiority in replacing a common first HIV medicine called as Lamivudine.

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