Scientific Research on Noni (Morinda Citifolia)

As a researcher in Hawaii, Dr. Ralph Heinicke became aware of the marvelous benefits of the Noni fruit and set out to find the pharmacologically active ingredient of the Noni. Dr. Heinicke had spent over 45 years studying the effects of an alkaloid he discovered and named xeronine is a relatively small alkaloid which is physiologically very active and important for the proper function of all cells in the body.

In his research, Dr. Heinicke discovered that the Noni juice contains appreciable amounts of the precursor of xeronine that he named “pro-xeronine.” Pro-xeronine releases pure xeronine in the intestines when it comes in contact with a particular enzyme also found in the Noni. Dr. Heinicke’s theory is that when released, xeronine actually works at the molecular level to repair damaged cells. Dr. Heinicke’s states that the primary function of xeronine is to regulate the rigidity and shape of specific proteins. Since these proteins have different functions within the cells, this explains how the administration of Noni causes an unbelievably wide range of physiological responses.

Anti-Cancer Activity of Morinda Citrifolia on Intraperitoneally Implanted Lewis Lung Carcinoma Syngeneic Mice

This is a highly significant study by a team of researchers from the University of Hawaii led by Annie Hirazumi. Ms. Hirazumi became interested in the study of the Noni fruit because of earlier experiences with its amazing qualities. Her father helped a good friend with the juice of the Noni and later, Annie administered Noni to a pet dog who was dying. The dog recovered miraculously, and Annie set out to find out more about this incredible fruit.

The study by Ms. Hirazumi and her colleagues was conducted on live laboratory mice. The mice were injected with active Lewis Lung Carcinoma cells (LLC). Untreated, the mice died from 9-12 days after injected from the tumor growth. A portion of the injected mice were treated with Noni juice in five separate daily treatments.

The Noni juice was shown to significantly increase the life span of the treated mice (from 105% – 123%) with 9 of the 22 mice surviving for more than 50 days.

The experiment was repeated on a different lot of mice with similar results. The Research Team concluded that the Noni juice seems to act indirectly by enhancing host immune system involving macrophages and/or lymphocytes.
Induction of Normal Phenotypes in [Tahitian Hut] RAS-transformed cells by Damnacanthal from Morinda Citrifolia

In this study, a team of Japanese researchers studied the effect of over 500 extracts from tropical plants on the K-ras-NRK cell, (a precursor to certain types of cancer). The compound, damnacanthal, found in the Morinda Citrifolia (Noni), was found to be an inhibitor of Ras function.

The research: Ras cells were seeded into 96 plates and incubated at 33 degrees Centigrade for 24 hours. The Noni plant extract was added and the cell morphology was examined every day for 5 days. The Ras function was inhibited by the injected plant extract. This same compound has been found to inhibit the Epstein-Barr virus early-antigen activation. The extract from the Morinda Citrifolia was found to be most effective in inhibiting Ras function among the 500 tested extracts.

Analgesic and Behavioral Effects of Morinda Citrifolia

In this study, the team lead by French scientist Chafique Younos, tested the analgesic and sedative effects of extracts from the Morinda Citrifolia Plant. They were aware of the traditional use of the plant as a general analgesic, and set out to determine if those claims were valid. The extract was shown to be non-toxic and did show a significant, dose-related, central analgesic activity in the treated mice. This study included various experiments on the treated mice to determine the analgesic effect, if any, from the plant extracts of the Morinda Citrifolia (Noni). The conclusion of these researchers was that the extract did in fact demonstrate analgesic effects consistently in each experiment. The conclusion of this study included a simple statement from the authors: “These findings validate the traditional analgesic properties of this plant.”