Synergetic Action of a Natural Antiviral

Braz, Helyson

The flu is a major problem detected in many cities around the world, which damages and interferes demonstrably in the daily routine of everyone. Due to its high mutagenic rate, there is the need of producing a natural medicine to treat the flu symptoms and inhibit the virus protein synthesis. The pharmaceuticals available to treat this disease show low response against symptoms and many side effects. This research project had as its main goal the development of a natural antiviral that showed high response against the flu symptoms and verify its real capacity of modifying the virus structure. I prepared a pulp made of acerola (Malpighia glabra), cashew apple (Anacardium occidentale), guava (Psidium guajava), and pomegranate (Punica granatum L) seed oil. I did the physical-chemical analyses of pH, total soluble solids and total titratable acidity. I identified the bioactive substance by Gas chromatography (CG-MS) and confirmed the presence of HTX-14, a substance that neutralizes the hemaglutinin. The influenza virus had its physical alterations and tones observed in an electronic microscopic using three different situations: with the prepared pulp, with a pharmaceutical medicine; and with a control group (nothing added). The test indicated that the pulp broke the virus capsid in 20 minutes. It was faster than the pharmaceutical medicament. The disruption of the virus shell prevented the binding with the cell surfaces and broke the infection cycle. The pulp was effective against the virus.

Awards Won:

Third Award of $1,000