## **Biological** Chemical **Fixation** Fixation Agriculture Food Figure 1. *Azolla* in health perspective Azolla Projects, ESPOL, Ecuador ecosistemaguayas@gmail.com

## Azolla. Other perspective

To Francisco Carrapiço, who has been the inspiration for our work?

The human body consists mainly of oxygen (61.4%), carbon (22.9%), hydrogen (10%), nitrogen (2.6%), calcium (1.4%)... All these elements with the exception of nitrogen are generated by natural processes, but the nitrogen is generated artificially by means of urea fertilizer used in agriculture, that provides food to the population. It is possible that this element, due to urea manufacturing process, is eroding the health of this civilization. We could emulate Rachel Carson and her book "Silent Spring" written in 1962, only now the book could be entitled "Global Silence", which should materialize in the disappearance of the human species. The way to avoid this silence is the use of nitrogen-fixing organisms, like Azolla, which could effectively help countries to improve a more sustainable agriculture, without the risk of problems associated with the adverse effects of chemical fertilizers on long term soil fertility, soil productivity and environmental issues (Figure 1).