

## LETTER TO THE EDITOR

### “QUO VADIS, LIFE ON EARTH”

March 1<sup>st</sup>, 2012

Dear Sir,

Probably the most important thing that we have on this planet called Earth is Life. It is difficult or maybe impossible to predict how long this can last in time and in the Universe, but it is clear that human life or any other species' life are all vital for the smooth running of life on Earth. When the interaction between the elements of the Earth's ecosystem is altered, there is probably something wrong going on. The atmosphere's gases are crucial for life on Earth. The rate of production/consumption of, for example, oxygen and carbon dioxide, could be “translated” as the forestation/deforestation of Earth and the operation of industry on it. While the carbon dioxide producers support economic interests and compete with each other, especially in specific countries, parts of the natural planet's “lungs”, like the Brazilian Amazon forests, are destroyed through deforestation. “If it gets a little bit drier and warmer, the forest here could disappear even without human interference” said Rodolfo Salm, University of Para, Amazon town of Altamira, quoted recently in a prestigious international newspaper<sup>3</sup>. The temperature is a crucial factor which assures life on Earth. No matter the season or geographical coordinates, the human body works perfectly at given normal body temperatures. Can it adapt itself and survive at different temperatures? Perhaps, yes, but probably resulting in possible abnormal consequences. The same happens with the Earth. Its temperature is changing, commonly called “climate change”. Does it really affect life on Earth? One of the demonstrated effects of the global climate change is the modified lives of several species and organisms. The distributions of many terrestrial organisms are currently shifting in latitude or elevation in response to climate change<sup>1</sup>. The climate change is predicted to increase “extreme events”, to affect human health, by altering the risk of developing infectious diseases and various skin diseases or tumors<sup>4,6</sup>. Climatic factors influence the emergence of infectious diseases. Global warming can cause the sea level to rise, changes in the amount and the pattern of precipitation and can reportedly influence the evolution of animals, can increase disease prevalence and disease progression and can even cause animals to become extinct. The melting ice glaciers could release bacteria, fungi and viruses trapped in the ice during the freezing process that have been lying dormant for thousands of years<sup>2</sup>. Global warming has been observed in some mountains, where previously the snow usually never melted even in the summer. In the Natural Park Retezat in Europe, part of the Carpathian Mountains, which have been in general well preserved and constitute an important part of Europe's natural resources<sup>5</sup>, in the year 2000 it was common place to find permanent snow during the summer season. Moving forward to the summer of 2011 it is impossible or very difficult to find any snow in the same mountains and season. These things suggest that if Life on Earth continues to go on in the same way, more changes are expected to happen in the following years. Is this good for Life on Earth? Probably not. It should be clear that humans do not have to wait for these changes to happen. The pace of change seems to be fast and there is no time to wait to prevent them from happening. Politicians or any other people, who might be responsible for the causes that influence the Earth's temperature, should act now. Now it is maybe too late to prevent “illness”. Earth seems to be affected already. Whether or not more “pathological conditions” can be stopped from appearing, it remains to be seen. Time is crucial and no other interests should be more important than the common worldwide interest that we should be concerned about: defending the health of the Earth and life on it, for ourselves and for the generations to come. Some measures perhaps shouldn't wait any longer at all. Some examples: stop polluting sources (particularly the big ones) or replace them with non-polluters and stop deforestation and develop reforestation worldwide. On a smaller scale, people should use polluting machines (like cars) only when is absolutely necessary and recycle their trash. Earth cannot be “treated” with words. Action is needed. There are no barriers that can stop the movement of vital/poisoning gases. Climate change on Earth knows no boundaries. Only by being united and responsible can we defend the health of the Earth and life on it. More research and evidence with regard to the Earth climate change and its effects are recommended.

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