## MILDRED MATHIAS A COMPLETE BOTANIST

Words of A. Gómez-Pompa at the Neotropical Symposium (UCLA October 27, 1995)

Ten years ago I was hired by UC Riverside to direct a new multicampus research unit on Mexico and the United States, UC MEXUS. I had the opportunity to suggest a few names of UC faculty to be appointed to the UC MEXUS presidential advisory board. But the first name that I suggested, Mildred Mathias, came as a shock to some. Was I sure, they asked, that I wanted Mildred as part of this influential body? After all, they said, "she is a botanist with no experience with Mexico and no relationship to UC MEXUS!" I responded, "Believe me, I know what I am doing. Mildred is no ordinary botanist!"

I was, of course, right. Mildred was appointed and she became not only a very active member of the UC MEXUS Advisory Committee but one of the organization's strongest supporters at critical times. In her kind and typically unpretentious way, Mildred was a very strong-minded person with impressive knowledge about all kinds of issues, not only those related to plants, but also to people. She was a very broad-minded and learned botanist with a multitude of diverse interests.

Recently I heard a passionate speech from the director of the Huntington Garden about the importance of plants in our world and something wrong is happening to the field of his perception that botany in our universities. He mentioned the case of a large California university that does not offer a single botany course. Botany departments are considered to be old fashioned and new and specialized departments are replacing them. The enormous advancement of the molecular and cellular level is importance and undeniable, but these areas have grown to the detriment of botanical science at the organismal level.

Like botany departments, plants as organisms are losing ground in their appeal to new scientists and granting agencies. This is happening despite the fact that a major challenge of our time is the understanding of the diversity of nature at the organismal and species level. One of the most remarkable products of the evolution of matter has been the production of discontinuous entities of living organisms that we call species. Each is different from every other, and this is one of the most remarkable products of nature. Species diversity is central to life on earth; however, it is not a central issue in our universities today.

Fortunately, we, as humans, have an innate attachment to plants, we love plants: a clear-cut wilsonian biophilia. So we have good news. For strange and fortunate reasons, the whole field of plant diversity is still alive and well, but it has become solely the effort of botanical gardens, natural history museums, and protected areas. These institutions have benefited from the phytophilia of the general public, which generously funds many of their efforts. They have assumed the responsibility to maintain interest in and research on plants, with the goal of, in the near future, bringing back organismal botany to our classrooms and curricula.

Mildred Mathias had no doubts about this. Her career speaks of arduous work to create, promote, and maintain botanical gardens, herbaria, and protected areas of all kinds. Her research, teaching, and her many professional activities and personal interests were right on target.

We need many more botanists such as Mildred: Complete botanists. (I use "complete" in the sense of the remarkable Lincoln Constance article some years ago: "The complete taxonomist") We need complete botanists to advance knowledge about plants as organisms in our universities and to train new botanists with a broad outlook. We should use our biophilia, or even better phytophilia, to attract students and funding agencies to support research that will improve

our understanding of the plant kingdom and help us to find better ways to conserve this precious heritage on our planet. Thank you, Mildred, for unceasingly pointing out the way.