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Letter to the Editor

Indigenous knowledge: an inexhaustible “information bank” for toxin research

As described in its “aims and scope”, *Toxicol* publishes research articles on or related to toxins from animals, plants, and microorganisms. The meanings of the word “toxin” relate to all aspects of human life, especially human health. Though toxins are usually regarded as detrimental to health, they have shown much excellent potential in treating certain refractory symptoms (Harvey et al., 1998), such as cancer, and stubborn dermatosis, etc. Thus proper screening and identification of toxins is essential. Organisms are a main source of toxins. However screening and identification of toxins from diverse organisms is an extremely time-consuming and random process if there are no prior references to this organism. Boosting efficiency of toxin screening is of great import.

Western pharmaceutical companies have derived profit and avoided much supererogatory expense from random screening by looking to traditional or ethnomedicine (Farnsworth, 1993; Vagelos, 1991). There is extraordinarily abundant knowledge on “toxins” from the long-term practices of indigenous and ethnic peoples. For example, in history many tribes used toxins taken from plants or other materials to make their hunting weapons, such as arrows. Traditional healers used toxins to treat certain diseases. Some past toxin related research efforts are based to some degree upon traditional knowledge on toxins. The history of human recognition of toxins is as long as the race’s history on earth. However with the invasion of exotic cultures and change of traditional habitats, much indigenous knowledge is being or has already been lost. The human process of knowledge accumulation is a dynamic one, be it modern, or traditional. Although loss of old knowledge is accompanied by accumulation of new knowledge, we have no reason to let traditional knowledge become extinct. Knowledge loss is an irreversible process. Loss of indigenous knowledge on toxins is especially severe. At present, many of the practical uses for toxins among indigenous people have already died out. The substances are used for neither tools nor medicine; only recognition of their poisonous properties remains. Perhaps after many years, even the recognition of a “poison sign” will be lost entirely. In losing this indigenous knowledge, we are losing a treasure of the human race. Thus the investigation and research of indigenous knowledge on toxins is imperative. It will not only stop the loss of knowledge, but also widen the scope

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of toxin research by providing a valuable knowledge or information and resource base.

Unfortunately, there are presently no special journals for publishing the results of indigenous knowledge on toxins. As an international journal for toxin research, *Toxicon* should encourage the research and investigation of the indigenous knowledge on toxins, and provide a place for publishing such research. In fact, screening of indigenous toxins is a sustainable and efficient way to find “new” useful poisonous compounds, as accumulation of indigenous knowledge is an unceasing process. Indigenous knowledge is an inexhaustible “information bank” for toxin research; to save indigenous knowledge on toxins is to continuously pump fresh blood into toxin research.

References

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