Research on Biologically Active compounds from Natural Sources

Prof. Hideji Itokawa, Dept.of Pharm, Tokyo Univ.of Pharm. & Life Sci.

To date, a lot anticancer agents have been isolated from natural sources; from microorganisms, from fungi and from higher plants. At present in our laboratory, we are focussing to higher plants for screenig antitumor agents. From higher plants, many kinds of anticancer agents have been isolated and applied for clinical use; vinca alkloids from Vinca rosea, podophyllotoxin from Podophyllum Peltatum, camptothecin from Camptotheca acuminata, taxol from Taxus brevifolia and curcumol from Curcuma aromatica. We also collected many materials from all over the world for screening test against Sar coma 180A and some tumor cell lines.

As the results, we observed that various extracts of them revealed antineoplastic activity. For instance, Curcuma app. and Alpinia spp. of Zingiberaceae;Rubia akane, Cocculus trilobus and so on.