

Download Plant And Human Health Volume 1

Ethnobotany And Physiology

Nicotine (1) is a naturally occurring alkaloid mainly found in dried leaves of *Nicotiana tabacum* belonging to family Solanaceae. Nicotine binds to nicotinic cholinergic receptors. It facilitates neurotransmitter release and responsible for behavior-modifying effects in human being. Plant pathology (also phytopathology) is the scientific study of diseases in plants caused by pathogens (infectious organisms) and environmental conditions (physiological factors). Organisms that cause infectious disease include fungi, oomycetes, bacteria, viruses, viroids, virus-like organisms, phytoplasmas, protozoa, nematodes and parasitic plants. Not included are ectoparasites like insects ... Herbalism (also herbal medicine) is the study of botany and use of plants intended for medicinal purposes. Plants have been the basis for medical treatments through much of human history, and such traditional medicine is still widely practiced today. Modern medicine makes use of many plant-derived compounds as the basis for evidence-based pharmaceutical drugs.

1. Introduction. For millennia, medicinal plants have been a valuable source of therapeutic agents, and still many of today's drugs are plant-derived natural products or their derivatives (Kinghorn et al., 2011, Newman and Cragg, 2012). However, since natural product-based drug discovery is associated with some intrinsic difficulties (discussed in more details in Section 2.1), pharmaceutical ...