## Illegal Trade in Plants- Driving Biological Invasions and Bio-piracy

D.S.A. Wijesundara
National Institute of Fundamental Studies
Hantane Road, Kandy, Sri Lanka

Passage of plants across geographical borders, aided by man, became prominent about five centuries back. The European explorers were the key players involved in the spread of flora and fauna among different continents. Some of those historical plant introductions shaped agriculture, forestry, and even the economies of recipient countries. Illegal trading of plants has now become a significant factor threatening biodiversity and is proliferating in biodiversity-rich countries in many parts of the world especially Asia. Sri Lanka is an island with very rich plant diversity with nearly 30% of the indigenous flowering plants endemic to the island. There are also many endemic pteridophytes and non-vascular plants. The most popular plant species affected by illegal traffic in Sri Lanka at present are Gyrinops walla, Salacia reticulata and Santalum album. There are also reported incidences of smuggling of spores of ferns. Illegally brought in plants are used as aquarium plants while others are used in the ornamental plant industry, openly displayed and sold even though these are contraventions of the Fauna and Flora Protection Ordinance, Forest Ordinance and the Plant Protection Act. Some of those plants brought without following proper protocols have even become serious invasive species threatening indigenous biodiversity. Orchids are among the most vulnerable groups of plants affected by illegal trading in Sri Lanka. As many of our orchids are smaller epiphytes it is easier to prepare them for illegal export. There are also some plants taken from natural habitats and kept as collectors' items or for research. In some instances, valuable indigenous plants have been exported legally but with deliberate misidentification in the permit to provide them with false names. Prior to the existence of the Convention on Biodiversity(CBD) there was almost a free passage of plants and animals between Sri Lanka and other countries. Some of these stated as material collected for scientific studies for work with foreign academic institutions have led to biopiracy where products were developed from them but patented by those foreign institutes without due benefits to Sri Lanka. This study clearly shows that policies and measures to prevent biopiracy and invasive species introductions through plant trade are urgently needed.

Key Words: Illegal indigenous plant trade, biopiracy, invasive species, Convention on Biological Diversity, Sri Lanka, Fauna and Flora Protection Ordinance, Forest Ordinance