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Submission	
Signature of officer responsible for submitting national report	
Date of submission	

Please provide summary information on the process by which this report has been prepared, including information on the types of stakeholders who have been actively involved in its preparation and on material which was used as a basis for the report

As National Focal Point to the CBD, the Ministry of Forestry and Environment(MFE) has its own division to handle Natural Resource Management affairs. In that Division there is a section called Biodiversity Secretariat which handle Biodiversity affairs and issues at the national level.

This Biodiversity Secretariat has number of coordinating mechanisms to receive and disseminate Biodiversity related information and also it has the ability to integrate many Biodiversity related concerns into other agencies, NGOs and other organizations programs through these coordinating mechanisms.

One success story of these coordinating mechanisms is the attraction of MFE's attention in the spread of invasive species in Sri Lanka. For the first time after a long time in the year 1988/99 the MFE got to its notice the spread of Mimosa pigra, Parthenium hysteroporus^{god}, Aligator weed in Sri Lanka through its stockholders in the above mentioned coordinating committees.

Upon these information, the MFE treated the spread of these alien invasive species is a national issues and a severe threat to Sri Lanka's native Biota. Then, it organized Sri Lanka's first ever awareness workshop on Alien Invasive Species in Colombo. This was participated by various govt., department and ministries, NGO's, CBOs, University academics etc and in that meeting, the MFE could gather substantial ammount of information on Alien Invasive Species and their effects on ecosystems in Sri Lanka through number of invited presentations by local experts. These base of information were compiled as a proceeding and it was used to complete this report.

A copy of the executive summery, introduction and recommendations of the senior proceedings are attached herewith.

Article 8h Alien species

1. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?			
a) High	✓	b) Medium	
2. To what extent are the resources available adequate for meeting the obligations and recommendations made?			
a) Good		b) Adequate	
		c) Limiting	
		d) Severely limiting	✓

3. Has your country identified alien species introduced?	
a) no	✓
b) only major species of concern	
c) a comprehensive system tracks introductions	
4. Has your country developed national policies for addressing issues related to alien invasive species?	
a) no	✓
b) yes – as part of a national biodiversity strategy (please give details below)	
c) yes – as a separate strategy (please give details below)	
5. Has your country assessed the risks posed to ecosystems, habitats or species by the introduction of these alien species?	
a) no	
b) only some alien species of concern have been assessed	✓
c) most alien species have been assessed	
6. Has your country undertaken measures to prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species?	
a) no measures	
b) some measures in place	✓
c) potential measures under review	✓
d) comprehensive measures in place	

Decision IV/1 Report and recommendations of the third meeting of SBSTTA

7. Is your country collaborating in the development of projects at national, regional, sub-regional and international levels to address the issue of alien species?	
a) little or no action	
b) discussion on potential projects under way	✓
c) active development of new projects	

8. Does your national strategy and action plan address the issue of alien species?	
a) no	
b) yes – limited extent	✓
c) yes – significant extent	

Case-studies

9. Has your country submitted case studies on the prevention of introduction, control and eradication of alien species that threaten ecosystems, habitats or species, in response to the call by the fourth meeting of SPS IIIA?	
a) no – please indicate below whether this is due to a lack of available case studies or for other reasons	✓
b) yes – please give below any views you may have on the usefulness of the preparation of case studies for developing a better biological understanding of the problem and/or better management responses	
10. How many case studies are available that could be used to gain a better understanding of the issues surrounding alien species in your country?	
a) none	
b) 1-2 – limited understanding	
c) >2 – significant information available	✓

Transboundary issues

11. Are known alien invasive species in your country also a problem in neighbouring or biogeographically similar countries?	
a) not known	
b) none	
c) a few – but in general alien invasive species problems are specific	
d) more than a few – in general we share common problems with other countries	✓
12. Is your country collaborating in the development of policies and programmes at regional, sub-regional or international levels to harmonise measures for prevention and control of alien invasive species?	
a) little or no action	✓
b) discussion on potential collaboration underway	
c) development of collaborative approaches for a limited number of species	
d) consistent approach and strategy used for all common problems	

Further comments

This has reference to the details given in page 4 too. After the first National Awareness seminar on Alien Invasive Species, (MFE) took it into its thorough notice that the spread of Alien Invasive Species in Sri Lanka should be given a national priority and treat it as a serious issue in Biodiversity conservation.

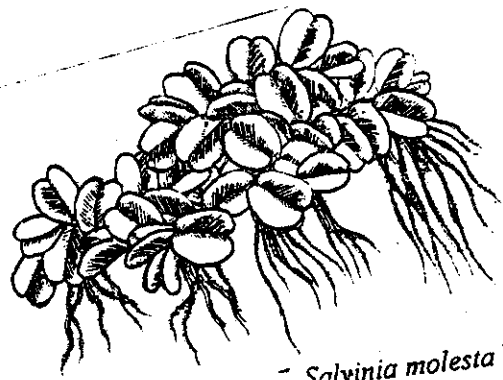
After several meetings with experts and stakeholders the MFE is now planning following activities to control, manage and eradicate Alien Invasive Species in Sri Lanka.

- a. To appoint 2 steering committtes to advice the MFE on Alien Invasive Fauna and Alien Invasive Flora
- b. To prepare an Action Plan to control, manage and Mitigate Alien Invasive Species in Sri Lanka
- c. To revise relevant policies and legislations to control and Mitigate the entrance and spread of Alien Invasive Species in Sri Lanka.
- d. To build the capacity in the MFE and other line agency officials specially in the Dept. customs and Quarantine Institutions (Flora and Fauna) on Alien Invasive Species.

The largest limitation in achieving the above factors is lack of funds and finances in establishing data bases, building up capacity, establishing connections with other international organizations like GISP etc and in acquiring mobility to monitor the spread of Invasive Species and also to monitor and evaluate the success of the action plan which is going to be brought up in the near future.

Help from overseas experts in this above regards will be very advantageous to the MFE. If the CBD can organize a grant funding source will also be very helpful to the MFE to carryout its activities more efficiently.

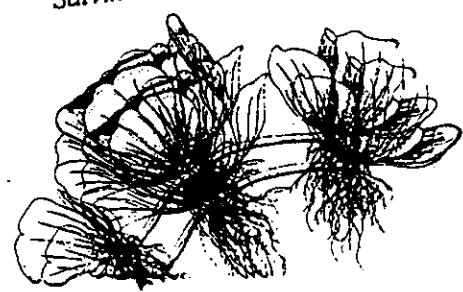
The MFE has already funded to conduct a policy related study on Alien Invasive Flora namely "Species Site Relationship for Invasive Behaviour of some selected plant species in Sri Lanka. (Authour: Dr. H.M.G.S.B. Hitinayake, Senior Lecturer, Dept. of Crop Science, University of Peradeniya, Sri Lanka) :



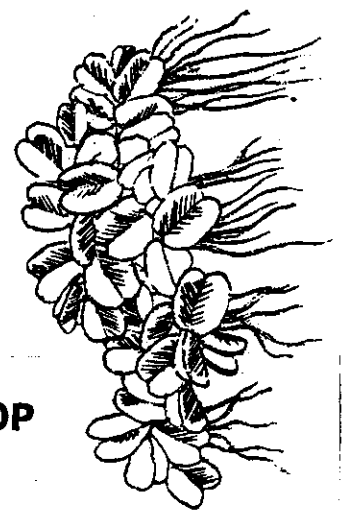
Salvinia molesta D.Mitch.



Lantana camara L.



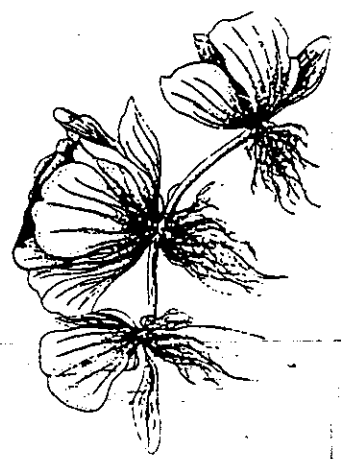
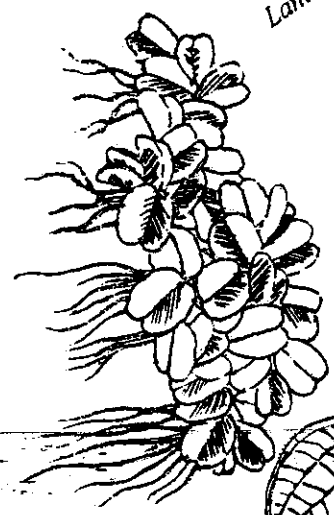
Mimosa pigra L.



Clidemia hirta (L.) D.Don

**PROCEEDINGS OF THE WORKSHOP
ON
ALIEN / INVASIVE SPECIES**

Organized by
Ministry of Forestry and Environment
and
Sri Lanka Association for the Advancement of Science - Section D



THE EXECUTIVE SUMMARY

Biodiversity forms the foundation for sustainable development and is the basis for the environmental health of all ecosystems and the source of economic and ecological security for present and future generations. Sri Lanka is regarded as one of the Biological Hot Spots in the world. This recognition alone depicts the extraordinary position that Sri Lanka holds in the sense of biodiversity among other countries.

Loss of biodiversity has been reported with time in all communities and ecosystems globally, which has resulted from various natural and other forms of human disturbances. The nations of the world gave a clear expression of their concern that "biological diversity is being significantly reduced due to human activities" when more than 150 countries became signatories to the Convention on Biological Diversity (CBD) within two weeks in 1992, and a rapid ratification process, subsequently. Sri Lanka became a signatory to the CBD in 1992, ratified in 1994, and the Ministry of Forestry and Environment was identified as the focal point for activities related to the Biological Diversity.

There is a growing international concern on the invasive behavior of alien plants, as their impact natural biodiversity is immense and usually irreversible. The global impact of the alien invasive plant species has been recognized in the Convention on Biological Diversity, which calls for the control and monitoring of alien species that threaten ecosystems, habitats and species (*i.e.* "Prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species" -article 8 (h) of the CBD).

In accordance with the above, the Ministry of Forestry and Environment has taken initiatives in the form of following to overcome the threats of alien invasive species on the natural biodiversity of the country, as given below;

enemies, (ii) fauna that relies on alien trees for a home, (iii) intrinsic growth and reproduction of the plant, (iv) efficiency of seed dispersal, (v) poor adaptation of native species, (vi) presence of an empty-niche, and (vii) disturbances to the ecosystem. The social and political factors include (i) deliberate introduction to the country, (ii) exchange of seed material between countries, (iii) transport of organic matter (compost) and soils that are contaminated with seeds, (iv) agricultural machinery contaminated with seeds, (v) lack of awareness, and (vi) lapses in legislation.

Harmful invasives have clearly shown their ability to prey on, out compete, hybridize with and infect native species. In small islands such as Sri Lanka, the alien/ invasive species can spread country wide within a very short time period and the consequences will be much more rapid. Therefore, Sri Lanka should be very alert and prepared to combat these alien/invasive species.

The information on ecology and biology of alien/ invasive plants/weeds and their costly impact on the economy and the environment of Sri Lanka is scarce. At present, there is no organized mechanism to monitor the spread of alien/ invasive plants in the country. Information on these aspects would be imperative to assess the damages and develop strategies to overcome the problems as Sri Lanka, an island nation, is especially vulnerable under the present circumstances to the invasion of more aggressive competitors from other parts of the world.

Initiatives are thus, needed as a broad front to prioritize the major troublesome plant species and strategies to control their spread. In this regard, a National Invasive Species Action Plan (NISAP) would be a necessity for Sri Lanka. Any such initiative to address the problem of alien/ invasive species in Sri Lanka should include, (i) survey on species of national and regional significance, their abundance and impact on environment/ ecosystems, and habitats, (ii) creation of awareness and understanding the magnitude of the problem, (iii) a mechanism to monitor the spread in different ecosystems, (iv) detail studies on ecology and biology of the

species, (v) appropriate strategies to prevent, eradicate, and manage the invasive plant populations, and (vi) strong legislative measures to stop deliberate or unintentional introduction of invasive species to the country.

Failing in these issues, the detrimental consequences of alien/ invasive plants to natural and agricultural ecosystems of Sri Lanka would be inevitable.

According to Article 8 (h) of the Convention on Biological Diversity (CBD), each contracting party should take action, as far as possible and as appropriate to prevent the introduction of, control and eradicate those alien species which threaten ecosystems, habitats and species. Sri Lanka signed the Convention in 05th June 1992 and ratified it in 23rd March 1994.

Ministry of Forestry and Environment, as the national focal point for the CBD, initiated action on Alien /invasive species in Sri Lanka in order to conserve country's Biological Diversity and Agricultural wealth. The prime intention of this is to assist the government and other management agencies to implement the Article 8 (h) of the Convention. The National Workshop on Alien /invasive species was thus organized as a prerequisite for the implementation of CBD. Available information of research activities relevant to alien / invasive species in Sri Lanka was gathered as a preparatory activity to the workshop.

Prevention of further losses of Biological Diversity due to the deleterious effects of alien/ invasive species is very much important. Therefore, there is an urgent need to disseminate information on management that can prevent invasions and eradicate or control establishment of invasive species. Demographic and climatic changes, rapid transportation capabilities, modern international trade agreements and other socio-economic trends increase the likelihood of spread of alien /invasive species throughout the world. State and private sector should understand this danger very well and take adequate measures to prevent and mitigate further harm.

The necessary legal, institutional and technological improvements should be clearly identified and implemented and these should be broad enough to keep pace with the increasing risks.

RECOMMENDATIONS

The need of a National Strategy/Action Plan and a comprehensive set of clear Guidelines in Prevention of Introduction, Eradication and Mitigation of the impacts of Alien / Invasive Species were identified as very important.

As alien / invasive species is a cross cutting issue, a thorough capacity building and awareness program on such species should be carried out for persons in all appropriate line agencies, especially the Customs Department and Plant and Animal Quarantine Stations.

Establishment of a National Database on alien/ invasive Species of Sri Lanka to monitor the activities was highlighted in the workshop.

The need to carry out countrywide awareness programs on alien / invasive species and establishment of a good reporting system of alien / invasive species were two other strong recommendations made at the workshop.

Inclusion of alien / invasive species in school curricula at least in the advanced level syllabus was another valuable suggestion.

It was proposed to prepare an interactive CD providing visual details and specifications of as much alien / invasive species as possible to assist in identification at the Customs Department, Board of Investments, Plant and Animal Quarantine Stations, etc.

It was also highlighted that all line agencies should appropriately address the issue of alien / invasive species for the conservation and sustainable use of biological diversity and to incorporate such activities into their national strategies, programs and action plans.

Participants of the workshop also highlighted the need of reviewing the existing national legislations, and regulations, and practices in Quarantine, Plant Protection and other relevant acts and ordinances to ensure that plants (or their propagules) or animals are not introduced to the country if there is a risk that they might become harmful to country's bio-diversity. Proper Risk Assessment Procedures should be adopted in such cases.

It was stressed that the above risk assessment should incorporate in the Environmental Impact Assessment (EIA) process when assessing projects in which biological material involved and proper attention has to be taken in import of Exotic Species from other countries.

The need to inform the general public of the possible dangers of alien / invasive species through a well planned Mass Media campaign (public awareness campaigns) was also highlighted in the workshop. This is in accordance with the provisions of Article 13 of the CBD.

Since the issue of alien / invasive species is becoming more alarming in the country, it was proposed to make more funds available for Research, Awareness, Prevention/ Control / Eradication and mitigation measures to combat this issue more effectively. Establishing better relationships with international agencies and other country programs dealing with alien / invasive species should be a must in this context.

It was recommended that the socio-economic aspects of alien / invasive species should also be given a priority.

Establishment of a mechanism to examine the Ballast Water emptying from the ships anchored in and out harbour, was also suggested.

It was also emphasized that the Interior Decorations done in Industrial projects coming under BOI and others use weeds as raw material. These industries should be well monitored especially when they discard their refuses, etc.

Sometimes weeds and pests can become invasive easily. There should be a clear weed and pest strategy in order to monitor, avoid, minimize and mitigate impacts of such weeds and pests.

Technologies should be developed to use weeds in viewing and handcraft industry.

The members strongly recognized that modern agricultural production relies heavily on the introduction of alien species and such introductions may provide increased economic benefits. However, in the long run, it also may endanger some local species. Therefore, strategies are required to reduce risk to the absolute minimum. A holistic cross-sectional approach including biological, ecological, social and economic issues and recommendations will be needed for policy makers to weigh up the different effects to introduce protection / prevention, control and mitigation measures and responsible decisions and give them priority in national programs.

It was recommended to appoint 2 separate Task Forces for alien / invasive flora and fauna.

A program to survey and monitor the ornamental fish industry (native and exotic) and ornamental plant and foliage industry and a set of guidelines for them.

To hold a national workshop on alien /invasive species to assess the national status and prepare a National Action Plan to combat the issue of Alien /invaive species.

To prepare a National Weed Strategy

There is a possibility for a plant occupied in any ecosystem/ location along with other plants to become invasive by capitalizing a weak link of the ecosystem over the other plants. Therefore, in such cases the invasive species will not be an alien.

All weeds can not be considered as invasive but all invasive species can most probably become weeds/ pests.

The National Alien/ Invasive Species Network should be linked with other Global Alien/invasive Species Networks. This National Alien/ Invasive Species List should be published in a separate web page (with all taxonomic and visual explanations).

Ministry of Forestry and Environment should establish connections/ links with other Global Alien/ Invasive Species networks and receive all accessible information on Alien/ Invasive Species (on research, control measures, Awareness measures and materials).

Ministry of Forestry and Environment should facilitate relevant officers from Ministry of Forestry and Environment and line agencies by providing funds to obtain international exposure and training in prevention, mitigation/eradication of alien/ invasive species and their harmful effects.

Alien/invasive micro-organisms should be included in the National List because there is an increasing threat from invasive micro-organisms.