



Jamaica's marine genetic resources: challenges and opportunities

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Exclusive Economic Zone

Planktonic and pelagic communities exist in the off shore water as well as a rich and relatively un-studied deep-water benthic fauna.

What is known

Experiences in collections

- Research laboratories
 - Port Henderson
 - Hofstra
 - Port Royal
 - Discovery Bay
- Expeditions
 - *Eastward and Gosnold* (1960/70)
 - Research institute from Florida (1990's)
- On going collections
 - Locally (Ascidians)
 - Overseas

Genetic Resources Policy

- NEPA has responsibility for access to genetic resources
- Protected, endangered & endemic sp - CITES, require MTA
- No Material Transfer Agreement for non-endemic sp
- No policy to regulate access to genetic resources (draft Bio-safety policy 75% complete)

Relevant Institutions

Institute of Jamaica

- Taxonomic Collection
- Scientific focal point of CBD

University of the West Indies

- Centre for Marine Sciences
- Life Sciences Dept
- Marine laboratories
- Chemistry Dept

ICBG Programme

New Drugs from Marine Natural Resources from Jamaica reefs Project (UMISS/UWI)

Medicinal potential for marine life in Jamaican coral reefs, has the potential to bring important pharmaceuticals to the market place.



Preliminary Grant Application

–Samples collected and exported under a **Materials Transfer Agreement**.

–**Filing of a US Utility Patent** –S5144w [2-0. ilint

Other on going activities

- **Teaching** - DNA extraction - sea urchin and seagrass (teaching methodology)
- **Research** -Chemical assays of marine algae, fungi, sponges, gorgonians
- **Collection** - by overseas researchers, extraction of bioactive compounds from sponges

Challenges (cont'd)

- Limited experience with access and benefit sharing, mistrust
- Illegal removal of organisms
- Threat to the livelihood of resources users

Opportunities

- For various types of research
 - Taxonomic/inventory
 - Biological/Ecological
 - Relatedness of species and adaptation potential
- To discover bioactive compounds
 - Treat and cure diseases
 - Food, health and cosmetic etc
 - Economic benefits
- Natural resource management, and enforcement and public awareness & education
- Collaboration/private investment

Thank You

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