Introduction to the National Marine Biodiversity Institute of Korea

Keyseok Choe, Hye Seon Kim and Changsu Lee

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Overview

Scale
Area 325,000m², Building 32,100m²

Major Facilities
Research building 8,300m² (26%), Storage 6,700m² (21%)  
Exhibition hall 11,900m² (36%), Education building 5,200m² (17%)

Function

Internal Research
- Sample Collection
- Long-term Strategic R&D

Legal Research
- MLRs Legal Investigation
- Basic Legal Research

National Resources Bank
- National Proliferation
- Securing MLRs

National R&Ds
- MLRs Reservation

Donation Program
- MLRs Donation

MABIK

National Authority
- Marine living resources under the Nagoya Protocol regime
- Efficient conservation of marine living resources

Executive Agency
- Conserving marine living resource
- Using those resources in a sustainable way

Operations & Facilities

Research & Storage
- Collection/Preservation/Utilization of marine life
- Academic research/study on marine life
- Professional preservation system equipped with temp., humidity, and disaster prevention controls

Education
- Deliver knowledge and information on marine life
- Promote understanding about effective utility of marine life resources

Exhibition
- Permanent/Special exhibition of marine living organisms
- The Seed Bank: MABIK symbolic structure for the Marine Biodiversity
### MABIK Marine Biodiversity Conservation Project

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#### Background

**How many marine species in Korea?**
- According to documentary survey, the marine species occurring in Korean waters account for about 25.4% (9,534) of total species (MLTM, 2007).
- The number of marine species is significantly lower than that of terrestrial species but much more diverse (34 phyla and 83 classes).

#### Current Status: Marine Biodiversity of Korea

- **Higher biodiversity**  
- **32 species/area**

#### Process of Specimen Productions

1. **Field Sampling**
2. **Preparation**
3. **Identification**
4. **Specimen Production**
5. **Barcode**
6. **Storage**

#### Collection of Marine Species & Goal

- Marine biodiversity research, storage of specimens for phylogenetic study, supporting marine bio-industry
- The donation program of marine organisms: Specimens, book or Paper, etc.
- Available on the web for collection information: [www.mabik.re.kr](http://www.mabik.re.kr)

#### Collection during the last 5 years:

- **Vertebrate**: 987 specimens
- **Invertebrate**: 1,654 species

#### Long-term Roadmap

- **Opening Phase (‘14-‘15)**
  - 5,000 species  
  - 600,000 specimens
- **Development Phase (‘16-‘20)**
  - 12,000 species  
  - 1,350,000 specimens
- **Leap Forward Phase (‘21-‘30)**
  - 20,000 species  
  - 3,500,000 specimens

#### VISION: Placing value on marine bioresources for a new future

- Fantastic, comfortable, and familiar marine exhibition
- Generate excitement about marine life to the citizen

#### How many marine species in Korea?

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#### Table: Marine biodiversity of Korea (MLTM, 2007)

<table>
<thead>
<tr>
<th>Animal Group</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Invertebrates</td>
<td>9,534</td>
</tr>
<tr>
<td>Vertebrates</td>
<td>987</td>
</tr>
<tr>
<td>Plankton</td>
<td>2,376</td>
</tr>
<tr>
<td>Algae</td>
<td>1,048</td>
</tr>
<tr>
<td>Fishes</td>
<td>1,851</td>
</tr>
<tr>
<td>Mollusca</td>
<td>1,575</td>
</tr>
<tr>
<td>Invertebrates</td>
<td>5,086</td>
</tr>
<tr>
<td>Marine Organisms</td>
<td>9,534 species</td>
</tr>
</tbody>
</table>

**Background**

**Key points**

- High level biodiversity around Korean seas
- Informative, easy, and quick web database

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