

ORNAMENTAL AQUACULTURE

Dr. P. Raja, M.Sc.,Ph.D.

Assistant Professor

Department of Zoology

St. Xavier's College (Autonomous)

Palayamkottai

ORNAMENTAL AQUACULTURE

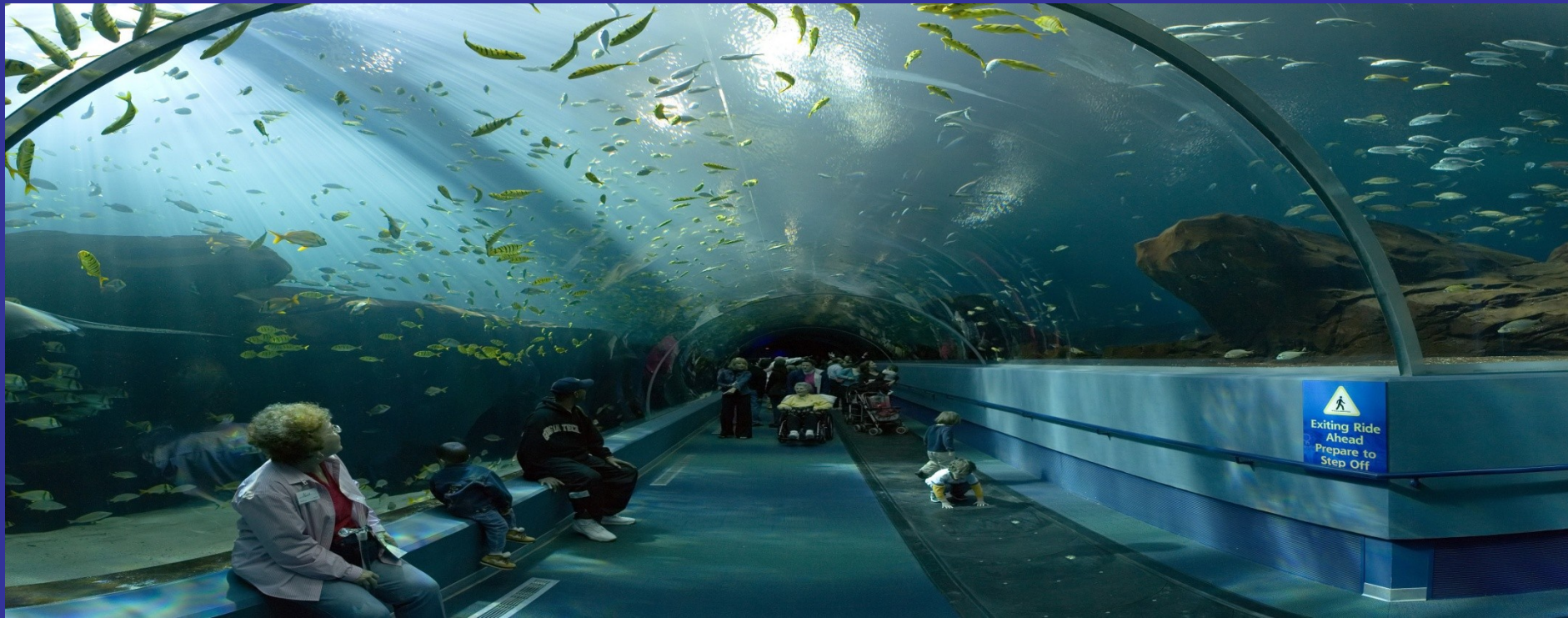
- Meaning and nature
- Components
- Management
- Selection factors
- Production methods
- Plant selection and culture
- Marketing
- Meaning and role of well-being relating to ornamental aquaculture

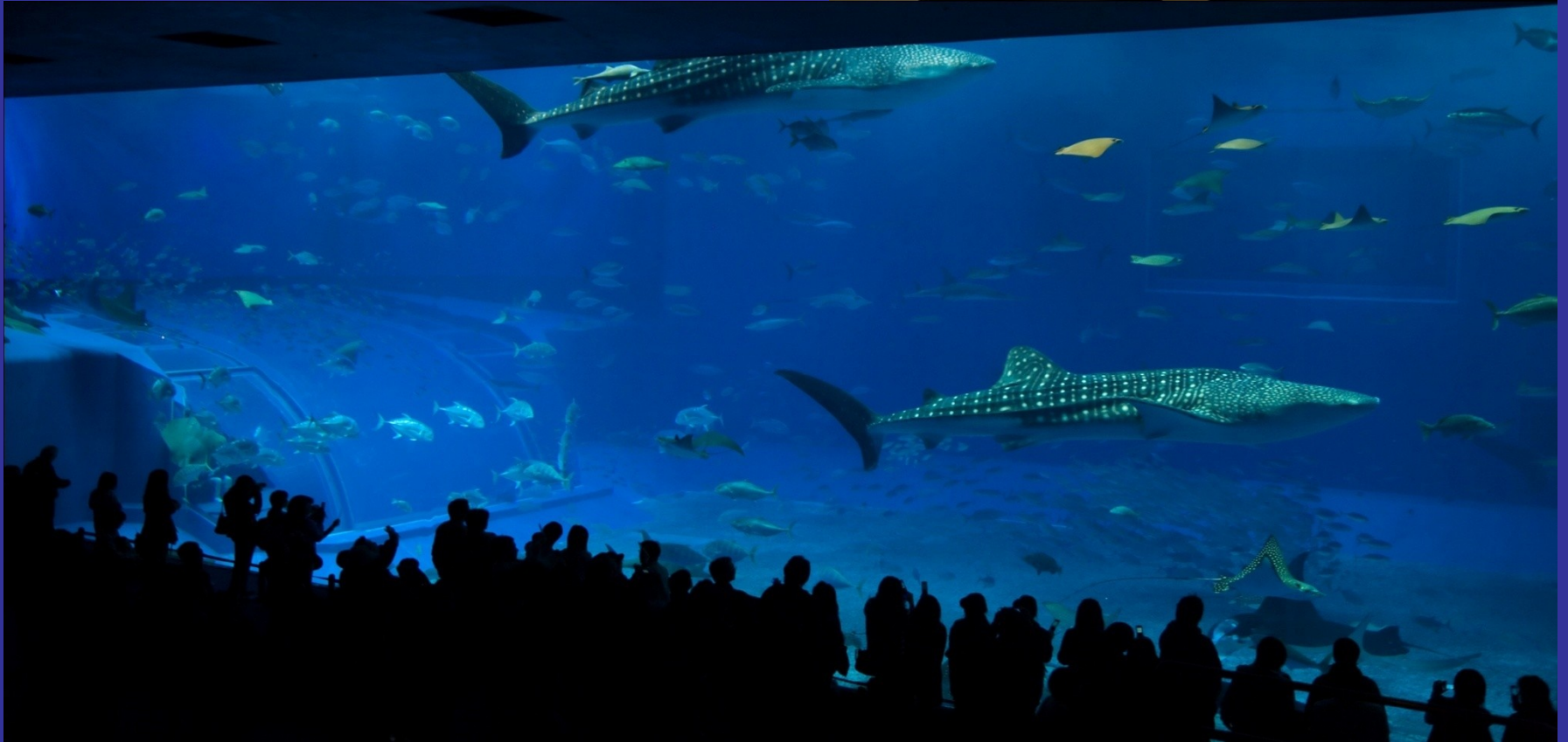
ORNAMENTAL AQUACROPS

- Multimillion dollar industry
- Primarily for recreational purposes
- Also for education and research
- Two main areas are fish keeping and commercial production
- Fish keeping is caring for ornamental fish species as a hobby
- Commercial producers breed and market organisms for the fish keepers

ORNAMENTAL AQ SYSTEMS

- Water container
- Satisfactory water source
- Equipment to maintain water quality





AQUARIUM SET-UP

- Proper site selection (convenient water source, electricity, water drains, etc.)
- Need GFCI electrical outlets
- Strong supports and tank cushion
- Add water, then substrate and filter
- Aeration and heater
- Accessories (covers and lights)

WATER FILTRATION

- Mechanical – passing water through materials that remove suspended solids
- Biological – use of bacteria and other living organisms to convert harmful substances to less harmful forms
- Chemical – use of chemical substances to purify water

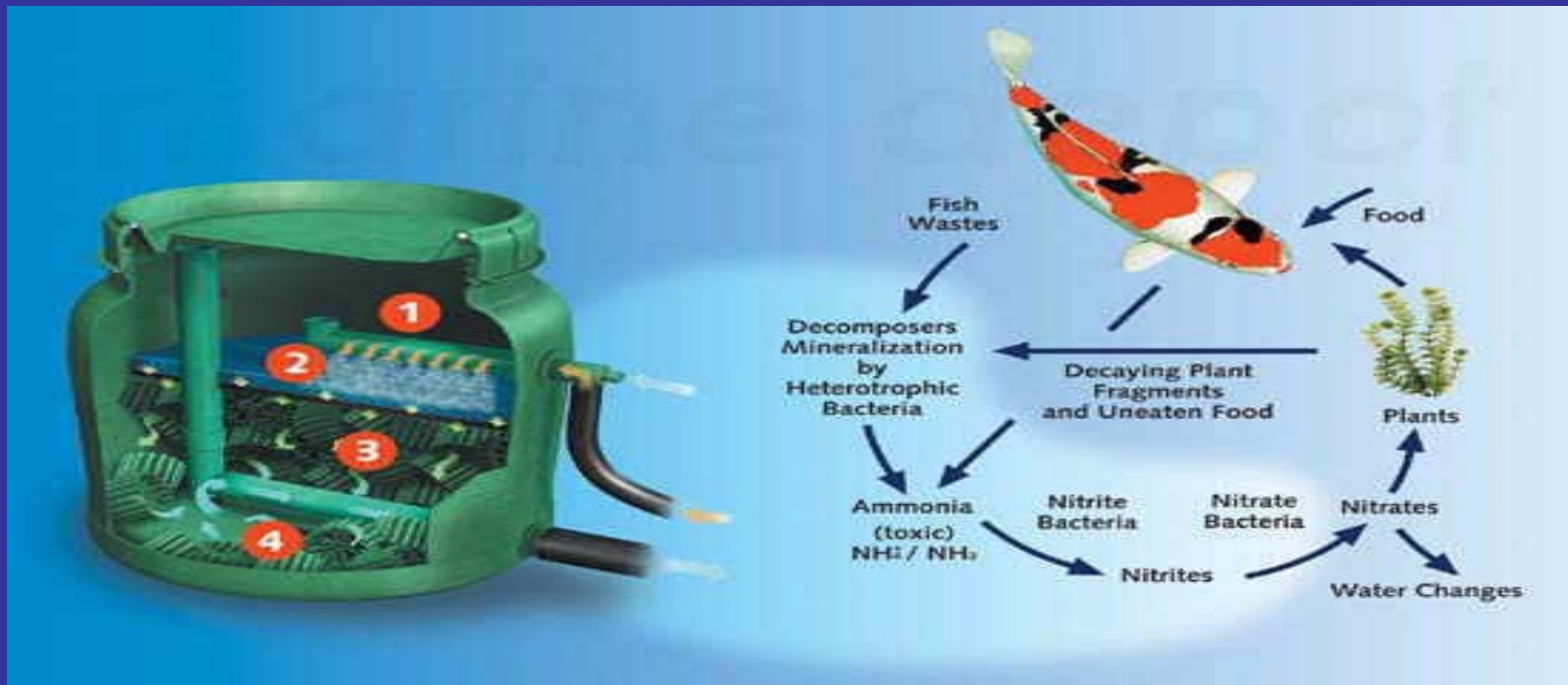
MECHANICAL FILTRATION

- Filter media may be gravel, sand, metal or plastic screens, sponge, or floss
- Media must be regularly cleaned or replaced



BIOLOGICAL FILTRATION

- Uses bacteria to convert ammonia to nitrite and then to nitrate
- Crawfish and snails help keep tank clean



CHEMICAL FILTRATION

- Chemicals include ozone, ultraviolet light, activated charcoal, and special chemicals



Fins,
Furs
Feathers,
Inc.

SPECIES SELECTION FACTORS

- Temperature – tropical versus temperate
- Salinity – freshwater, brackish, or saltwater
- Reproduction – livebearers versus egg-layers
- Size – size of fish needs to match tank
- Feeding habits – carnivores, herbivores, or omnivores

SPECIES SELECTION FACTORS

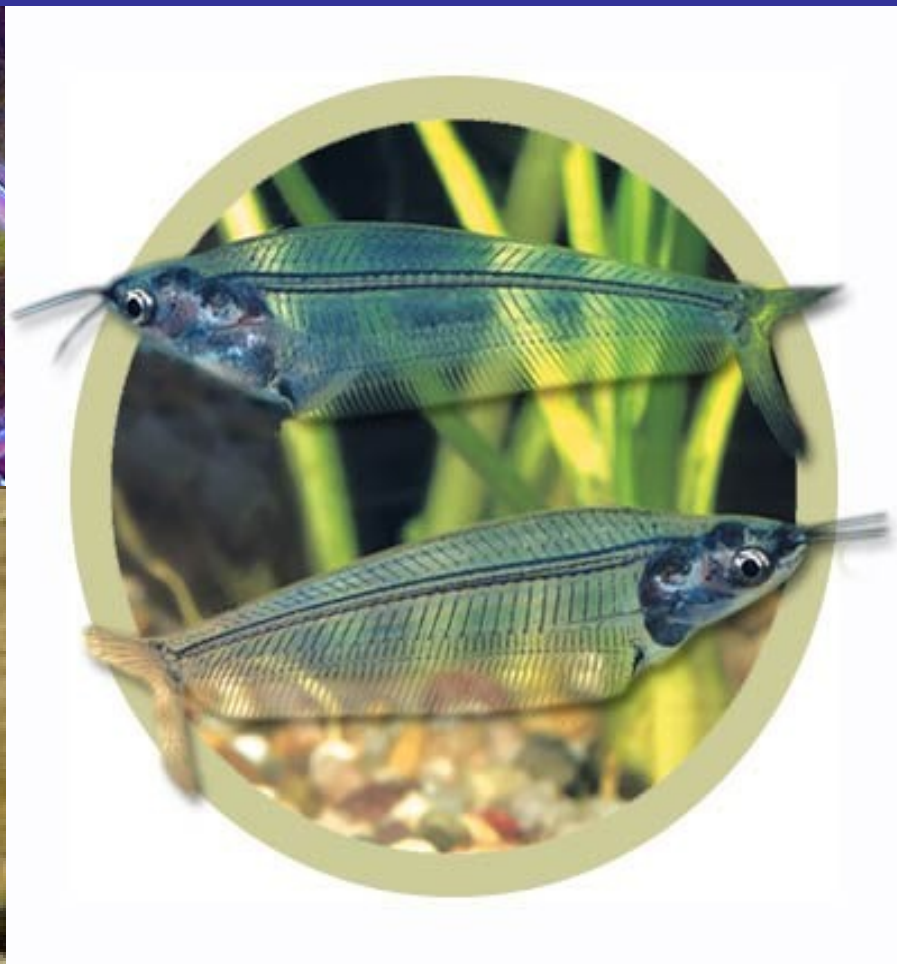
- Behavior – some species are aggressive
- Physical appearance – some species are “fancy” (unusual color, shape, etc.)



EASY-TO-GROW SPECIES



MEDIUM-CARE SPECIES



DIFFICULT-TO-GROW SPECIES



© JJPhc



ORNAMENTAL AQUARIUM PLANTS

