

STEP 14

Storage

Hiroyuki Motomura

After replacement of formalin with alcohol, the specimen should be stored in a specimen bottle filled with alcohol. In foreign museums, glass jars are often used as specimen bottles, but in Japan, glass jars of reasonable size and price are not readily available. Therefore, in many Japanese museums, specimen bottles made of polyvinyl chloride are used. In our museum, we choose the bottle size depending on the specimen size. We use a 3-L wide-mouthed T-type bottle, which is useful for fishes with large body width, such as blue-striped angelfish, although air circulation is more in this bottle. Sometimes, the lid can slip while carrying the bottles; therefore, they should be carefully handled. Following is a list of specimen bottles used in our museum.



Specimen bottles by AS ONE Corporation. From the left: 0.25-L, 1-L, and 2-L bottles.

AS ONE Corporation

Wide-mouthed T-type bottle with rubber seal (clear vinyl chloride)

0.3 L (width, 75 mm; height, 92 mm)

0.5 L (width, 90 mm; height, 118 mm)

1 L (width, 97 mm; height, 167 mm)

2 L (width, 112 mm; height, 255 mm)

3 L (width, 134 mm; height, 263 mm)

Wide-mouthed bottle with inner lid (clear vinyl chloride)

0.1 L (width, 48 mm; height, 82 mm)

0.25 L (width, 61 mm; height, 119 mm)

Wide-mouthed BB-type bottle without stopcock

20 L

Plastic container 75 L

Sanko Co., Ltd.

Plastic drum (open type)

25 L (width, 296 mm; height, 522 mm)

30 L (width, 312 mm; height, 502 mm)

120 L (width, 490 mm; height, 792 mm)

210 L (width, 580 mm; height, 974 mm)

Power drum (open type)

60 L (width, 400 mm; height, 618 mm)

Specimen bottles are labeled with family number and species name and arranged according to the number. Specimen preparation and arrangement are done by volunteer staff members. Therefore, we use standard Japanese names



Storage containers for medium to large specimens. Upper row: 20-L wide-mouthed BB-type bottle without stopper cock. Lower row: 25-L plastic drum. Label the front side with white vinyl tape, and write the family number and species name with alcohol-resistant Sharpie Fine Point pen (sold in Europe and the United States).



Specimen bottle labeled with family number and species name (2-L wide-mouthed T-type bottle).



Thermoelectric printer (Name Land; CASIO) for printing labels for specimen bottles. We use black ink for normal specimens and red ink for type specimens. Further, we use 12-mm-wide tape for 0.5- to 3-L specimen bottles and 9-mm-wide tape for 0.25-L specimen bottles.

instead of scientific names as species names. Labels are printed using “Name Land” by CASIO, which is a type of thermoelectric printer. A thermoelectric printer provides excellent resistance to alcohol (see Information 4), which prevents loss of label print because of alcohol.



Specimen fixed in 99% ethanol (for DNA analysis). Label is printed using a thermoelectric printer, which prevents deterioration or loss of print.



Shelf for storage of specimen bottles.