

# STEP 5 Assigning tags to specimens

Hiroyuki Motomura

After rinsing, each cleaned fish is assigned an individual number for individual identification of the specimen. When a few samples are treated together, each sample needs to be individually identified; they should not be thrown into disarray, so that there is no confusion arising in subsequent processes.

All specimens should be assigned individual numbers, especially for obtaining tissue samples for DNA analysis and for taking photographs. However, the number tag should not be attached to the fish body before taking photographs. This is because the tag will need to be removed while photographing and reattached to the fish body after the specimen is photographed.

As an individual number is assigned to a specimen, a specimen list should be simultaneously prepared using the sampling-date note as reference.

A list prepared using a regular or a mechanical pencil is maintained almost permanently. The specimen list should include the scientific name of the species.



Specimen tags used in our museum. Each numbered tag is cut and used for an individual specimen.

However, quick species identification of some fishes is quite difficult. In this case, the scientific name need not be written at this stage. If a long time is taken for identification, it will not be possible to record body coloration, since the body color fades with every moment. Identification can be performed taking enough time after the specimen is photographed.

## ■Preparation of a number tag

The number tag is made of cloth. Calico is the best cloth for the tag, since it absorbs inks well, is not a stretchy fabric, and does not tear easily. Serial numbers are printed on white calico by using a numbering machine with pigmented ink. The brevity code of the inventory location of the specimens is also printed in front of each individual number. A brevity



Left: numbering machine (D51, Lion Office Products Co. Ltd.). Right: inkpad.



Specimen tag. Serial numbers and museum abbreviation code are printed on calico (before applying collodion). Below: Collodion bottle.



code is an established code for the name of an international research institution. For example, the abbreviation code of the Kagoshima University Museum-Ichthyology is KAUM-I. The printed information on the calico tag is completely dried by air seasoning for at

least 1 day, followed by a few more days. Thereafter, the calico tag is coated with a formulated concentrated collodion solution to make it waterproof. The wet calico tag is then hung outside to dry, like washed clothes, secured by a clothespin.

If collodion is applied before completely drying the ink, the print will be smudged and become unreadable. A tag with an unreadable or missing number will obviously have to be remade. When a number tag is remade, the same numbering machine is not used. This is because the numbering machine will automatically print the next serial number. Thus, the use of the same numbering machine for reprinting a number tag is certainly wrong, since it will cause either overlapping or omission of numbers. A



Tapewriter (DM1585-B, Orient Enterprise Co. Ltd.) and number-tag tape (9 mm width).



Its use is convenient. Cut the calico tag 30–50 numbers and rolled and preserved.

tapewriter is a useful tool for remaking a particular number tag.

After the calico tag is coated with collodion, it becomes hard and waterproof like a plastic board. It can be easily cut using a pair of scissors and the ink too does not get washed in water. However, collodion application does not confirm alcohol resistance.

1. Obtaining tissue samples for DNA analysis  
→ Step 6

2. Pre-fixation (no tissue samples taken for DNA analysis)  
→ Step 7