RAISING AXOLOTLS IN INDIVIDUAL CONTAINERS

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Our experiences are based on about ten years' care of axolotls. They have been healthy when treated as follows:

Young animals: Small axolotls are grown first on a plate (such as a Petri dish) and fed with Artemia salina. The water is changed every day. When water in ponds in open air gets warm in the spring and there is plenty of Daphnia, these are used for feeding. Daphnia and other small animals are collected by a plankton net and mixed with pond water. Axolotls (20 - 30) swim in a plastic container (diameter, 27 cm.) in a 5 cm. thick water layer. Green algae grow at the bottom and along the walls. "Pond water" is changed every or at least every other day. The water is sucked out in a gentle manner taking off excrement so that the animals do not get disturbed and algae is left untouched. It is important that there be daphnia in the water for the axolotls to eat continually.

After three months the axolotls are about 5 cm. long with four legs. The containers are covered with a net to prevent the animals from escaping by jumping.

Adults: In September when "pondfood" gets scarce, the animals are made accustomed to meat little by little. At this stage it is very important to remove all the meat left uneaten from the bottom and take care of the purity of the water.

Tap water is good enough, even better than aerated tap water used before or water that was kept some days in containers to disperse chlorine. It seems that chlorine is not harmful, but it can possibly kill dangerous agents.

Grown-up animals are kept in containers in 5 - 10 cm. high layers of water so that when they stand they can breathe air at the surface. Plenty of space is obviously needed if there are many animals living in the same container. They easily get into fights and bite each other's legs. Our animals are kept in separate plastic boxes (about 30 x 40 cm.). Twice a week the axolotls are fed with minced heart, meat or liver. A few hours

after feeding, animals are removed by hand into a larger vessel, where they can swim in clean water. Their own box is cleaned and the water is changed. Some animals have lived seven years. One year-old animal has laid eggs.

Our problems: Hot weather during the summer and heating during the winter are dangers. (Our axolotls are kept in the same rooms with other laboratory animals.) We have tried to change the water frequently. The room temperature has been $20 - 25^{\circ}$ C.

We tried to ease the care of the animals by feeding and changing the water only once a week, which unfortunately caused deaths. In our opinion the purity of water is more important than the food.

Cultivation of the cells of axolotls has been unsuccessful.

An obvious reason seems to be that they are contaminated by fungi.

At present we have only a few axolotls alive, but we are very interested in hearing of experiences that other persons have of these animals.

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