Materials of Conferences

THE PRESERVATION OF THE OFFISH CAUGHT CTENOPHORES MNEMIOPSIS EIDYI (A.AGASSIZ)

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Because of the lack of the good fixative the morphological description of the and subsequent identification of the ctenophores were very difficult, because researchers have to worked mostly with living material.

Study of the preservation of ctenophores was the subject of many studies. But until recently, it was impossible to keep samples ctenophores for a long time.

The most successful was the fixation of *Mnemi-opsis leidyi* in cognac [1] and in an alcohol tincture of oak bark [2].

Experiments on the preservation of the ctenophore *Mneniopsis leidyi*, conducted in the laboratory of Hydrobiology Institute of Zoology of the National Academy of Sciences of Azerbaijan, have shown that the ctenophore *Mnemiopsis leidyi* may be preserve in an alcohol tincture of tea leaves (black and green).

Alcohol tincture of leaves of tea (black, green) has specific properties defined by the content of tannins, essential oils, alkaloids, amino acids, pigments and vitamins in it.

Fixation of mnemiopsis in the alcohol tincture of tea has several advantages. First of all, *Mnemiopsis leidyi* is well preserved in alcohol tincture of tea. Decomposition of the body of mnemiopsis was not observed. The alcohol tincture of tea is inexpensive and available fixing substance. The alcohol tincture of tea not poisonous.

However, this fixative has its shortcomings. First of all, the body of the ctenophore having a translucent milky color, colored in various shades of brown or green, depending on the variety of tea kinds and strength of spirit. Paint is resistant. In addition, muddy sediment can be appeared.

References

- 1. Shamionova N.Sh. Fixation of the ctenophore Mnemiopsis leidyi (A. Agassiz) // Conference of the Baku State University. Baku, 2010. P. 193–194.
- 2. Shamionova N.Sh. Fixation of Mnemiopsis leidyi in the alcohol tincture of oak bark // E- Conference of RAE «Biological Sciences». 2011.

The work was submitted to the International Scientific Conference «Environmental monitoring», Italy (Rome), September, 11-18, 2011, came to the editorial office on 23.08.2011.

TO THE STUDY OF FIXATION OF CTENOPHORE MNEMIOPSIS LEIDYI

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Attempts to fixing of the ctenophores were very much. Until recently the fixing substances used to preserve of ctenophores were complex in composition and they could not keep samples for a long time. Ehe first experiments on the fixation of the caspian ctenophore *Mnemiopsis leidyi* also have been unsuccessful.

For the first time the attempt to fixing the *Mnemiopsis leidyi* in cognac was successful. However, because of the high cost the cognac cannot be used to fixing large numbers of samples of ctenophore.

Researches on preservation of *Mnemiopsis* have been conducted in alcohol tinctures of various plants – chamomile, celandine, calendula, oregano, etc. However *Mnemiopsis* isn't fixed in alcohol tinctures of these plants.

The further researches have shown that the *Mnemiopsis* can be fixed in alcohol tincture of an oak bark and in alcohol tincture of tea leaves (black and green).

The cognac, oak bark and tea leaves contain large amounts of tanning substances. Therefore, it has been assumed that *Mnemiopsis* can also be kept in alcohol tinctures of other plants containing the big percent of tanning substances.

In an eucalyptus bark contains twice as much tanning substances than in the oak bark. Therefore experiments on preservation of *mnemiopsis* in alcohol tincture of an eucalyptus bark have been carried out. Researchers have shown that *Mnemiopsis leidyi* is well kept in alcohol tincture of an eucalyptus bark.

On the basis of these researches it is possible to draw a conclusion that the ctenophore *Mnemiopsis leidyi* can be fixed in alcohol tinctures of other plants containing the big percent of tannins. There are a lot of such plants.

Also it is possible to assume, that other ctenophores can be stored in alcohol tinctures of plants containing tannins. The fixation of offish caught *Mnemiopsis leidyi* and other ctenophores will promote their to the best studying

We hope that there will be exhibited not only *Mnemiopsis*, but also other ctenophores in museums shortly.

The work is submitted to the International Scientific Conference «Fundamental research», Israel (Tel Aviv), October 16-23, 2011, came to the editorial office on 23.08.2011.