Bulletin UASVM Animal Science and Biotechnologies, 67(1-2)/2010
Print ISSN 1843-5262; Electronic ISSN 1843-536X

Volunteer Species of Plants that Can Become Dangerous to Pisciculture

Doina STANA, Diana CENARIU, Sandor ROZSA

University of Agricultural Sciences and Veterinary Medicine, 3-5 Manastur Street, 400372 Cluj-Napoca, Romania; diacenariu@yahoo.com

Keywords: lakes, volunteer species, associations

SUMMARY

The purpose of this paper was to identify the existing species of plants around as well as inside the Aghires lakes and to determine their influence on the development of fish populations. The methods used refer to direct observation as well as identification of different associations. Following surface mining activity in the village of Aghires, Cluj nine artificial lakes were formed throughout the years. These lakes are surrounded by sterile hills that start to be covered by vegetation. The palustrine vegetation depends entirely on the water pH. From the vegetation point of view two major vegetation groups can be observed: aquatic or palustrine, among which there are no obvious limits. Two classes were identified with two Orders consisting of seven plant associations[1]:

A. ***Potamogetonetea pectinati*** R. Tx. and Prsg. 1942 **Class** with the **Order Potamogetonetalia pectinati** W. Koch 1926, with three **Associations**:

1. Potamogetonetum lucentis Hueck 1931 Ass. with species: *Potamogeton lucens* (30-65%), *Lemna minor, L. trisulca, Potamogeton nodosum, P. natans and Vallisneria spiralis.*

2. Elodeetum canadensis Eggler 1993 Ass.with species: *Elodea Canadensis, Potamogeton pectinatus, P. crispus, Ceratophyllum demersum and Myriophyllum spicatum.*

3. Potamo-Ceratophylletum submersi Pop 1962 Ass. with *Ceratophyllum submersum*

B. Phragmitetea Tx. And Prsg. 1942 **Class**, **Order Phragmitetalia** Koch 1926, with 4 **Ass**.:

1. Scirpo-Phragmitetum W. Koch 1926 Ass. with: *Schoenoplectus lacustris, Phragmites australis, P. comunis, Carex distans, Eleocharis palustris, Oenanthe aquatica.*

2. Typhetum angustifoliae Pign. 1953 Ass. with: *Typha angustifolia, Bolboschoenus maritimus, Schoenoplectus lacustris, Phragmites australis, Alisma plantago aquatica, Butomus umbellatus.*

3. Glycerietum maximae Hueck 1931 Ass. with**:** *Glyceria maxima*

4. Oenantho-Rorripetum Lohmeyer 1950 Ass. with: *Oenanthe aquatica, Rorripa amphibian, Lemna minor, L. trisulca, Polygonum amphibium and Lythrum salicaria.*

Some macrophyta algae associations: *Cladospora sp., Spirogyra sp., Oscillaria sp., Vaucheria sp*. intercrescenced with *Myriophyllum sp.,* at the lake shores, and in more deep areas *Polygonum amphibium, Batrachium sp.* and *Hippuris vulg*. were observed.

The *Ceratophyllum* species[2] found in the lakes were noticed to form a white sediment toxic on the development of fish populations. In the same time, *Phragmites comunis* decomposes and alters the quality of water when present in large amounts.

REFERENCES

1. Coldea, G. (1997). Les associations vegetales de Roumanie, Press. Univ. de Cluj
2. Passarge, H. (1995). Die Ceratophyllum-Geselschaften in Mitteleuropa, Coll. phytosoc. Bailleul., 1994, 23, 643-655, Berlin-Stuttgart.