AN EXTRA MURAL SEMINAR

ON

"EUTROPHICATION AND ITS IMPACT ON WATER BODY"

Presented By:

Prof. Ramesh Chandra Dash

Reader, Department of Botany

S.S.B College, Mahakalapara

On

18th January 2020

DEPARTMENT OF BOTANY

PATTAMUNDAI COLLEGE

PATTAMUNDAI

KENDRAPARA

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REPORT

An extra mural Seminar was organized by Department of Botany, Pattamundai College, Pattamundai on dated 18.1.2020 on the topic "**EUTROPHICATION AND ITS IMPACT ON WATER BODY".** Mr. Ramesh Chandra Dash, Reader in Botany, S.S.B College, Mahakalapara graced the seminar as an resource person.

The meeting was started at 11.00 a.m with the lighting of lamp by our respected guest and was presided by Dr. Anjali Kumari Dash, H.O.D. Department of Botany. Departmental Head welcomed the guests to the dais and gave a key note address of the topic.

The meeting was ended with a vote of thanks by Mr. Abhimanyu Mohanty, Demonostrator in Botany at 2.30 p.m.

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EUTROPHICATION AND ITS IMPACT ON WATER BODY

Eutrophication is the gradual increase in the concentration of phosphorus, nitrogen, and other plant nutrients in an aging aquatic ecosystem such as a lake. The productivity or fertility of such an ecosystem naturally increases as the amount of organic material that can be broken down into nutrients increases. This material enters the ecosystem primarily by runoff from land that carries debris and products of the reproduction and death of terrestrial organisms. Water blooms or great concentrations of algae and microscopic organisms often develop on the surface preventing the light penetration and oxygen absorption necessary for underwater life. Eutrophic waters are often murky and may support fewer large animals such as fish and birds than non-eutrophic waters. It is an enrichment of water by nutrient salts that causes structural changes to the ecosystem such as increased production of algae and aquatic plants, depletion of fish species, general deterioration of water quality

Impacts of eutrophication

Eutrophication can have serious effects, like algal blooms that block light from getting into the water and harm the plants and

animals that need it. If there's enough overgrowth of algae, it can prevent oxygen from getting into the water making it hypoxic and creating a dead zone where no organisms can survive.

Steps of Eutrophication

- Step 1: Excessive Nutrients Enter Waterways.
- Step 2: Nutrients Help Develop Plant Growth.
- Step 3: Algal Blooms Occur.
- Step 4: Algae Dies And Is Decomposed By Bacteria.
- Step 5: Decomposition Of Algae Increases Biological Oxygen Demand.
- Step 6: Fish And Other Aquatic Life Forms Die.

Human activities

Human activities can contribute excess amounts of nitrogen and phosphorus into water. Therefore human causes of eutrophication include the use of agricultural fertilizers. Other causes include sewage and aquaculture which is the growing or farming of fish, shellfish and aquatic plants.

Is eutrophication good or bad

In small amounts they are beneficial to many ecosystems. In excessive amounts, nutrients cause a type of pollution which stimulates an explosive growth of algae (algal blooms) that

depletes the water of oxygen when the algae die and are eaten by bacteria.

Cultural eutrophication

The known consequences of cultural eutrophication include blooms of blue-green algae, tainted drinking water supplies, degradation of recreational opportunities and hypoxia. Consequently, these ponds are also plagued by recurring cyanobacterial blooms and hypoxia. Cultural eutrophication is harmful, but it can be reversed if the nutrients come from easily identified point sources such as sewage treatment plants or septic systems.

Solutions to Eutrophication

The eutrophication can be checked by composting, by reducing pollution, by strengthening laws and regulations against non-point pollution and by ultrasonic irradiation (alternative solution to control and manage algal bloom).

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Department of Botany
Pattamundai College, Pattamundai
Extra Mural Seminar on "Eutrophication & its impart on Water Body."
Dt-18.01.2020

Sl No	Name of the Student	Roll No	Signature
1	Sonali Priyadarsani Parida	BS-19-122	Sonali Priyadarsani Parida
2	Shivasmita Debata	BS-19-098	Shivasmita Debata
3	Gayatree Jena	BS-19-091	Gayatree Jena
4	Prajna Parimita Dash	BS-17-127	Prajna Parimita Dash
5	Preeti Priyadarshini Kar	BS17-021	Preeti Priyadarshini Kar
6	Sarmistha Dash	BS17-156	Sarmistha Dash
7	Tanmaya parida	BS17-122	Tanmaya parida.
8	Sarasij kr. sethi	BS-17-093	Sarasij kr. sethi
9	Swagatika Patra.	BS18-123	Swagatika Patra.
10	Prajnya P. Behura.	BS18-134	Prajnya P. Behura.
11	Rakesh Rout	BS-18-112	Rakesh Rout
12	Madhusmita Mahapatra	BS-18-118	Madhusmita Mahapatra
13	Prajna Parimita Nayak.	BS-18-025	Prajna Parimita Nayak.
14	Annapurna Nayak	BS-18-028	Annapurna Nayak
15	Sradhanjali Das	BS18-137	Sradhanjali Das
16	Mousumi Parida	BS18-008	Mousumi Parida
17	Bikash Jena	BS18-129	Bikash Jena.
18	Jyotiprava Kar.	BS18-007	Jyotiprava Kar.
19	Monalisha Mahanta	BS18-038	Monalisha Mahanta
20	Shweta Dash.	BS17-147	Shweta Dash.
21	Ankita Priyadarshini	BS17-141	Ankita Priyadarshini
22	Sushreekarishma Samal	BS17-053	Sushree karishma Samal
23	Swagatika Nayak	BS17-143	Swagatika Nayak
24	Sreestideepa Nayak	BS19-106	Sreestideepa Nayak
25	Priyanka Priyadarshin Swain	BS19-057	Priyanka Priyadarshin Swain
26	Rashmita parida	BS19-029	Rashmita parida
27	Manisha Routray	BS19-028	Manisha Routray
28	Diptimayee Malik	BS19-071	Diptimayee Malik
29	Aiswaryanandini Pradhan.	BS19-085	Aiswaryanandini Pradhan.
30	Manoj Kumar Swain	BS(B)19-096	Manoj Kumar Swain.
31	Prasanna Kumar Nayak	BS17-102	Prasannakumar Nayak
32	Dibyanshu Das	BS19-022	Dibyanshu Das

33	Prisa Behera	BS17-056	Prisa Behera
34	Barsarani Dash	BS17-131	Barsarani Dash
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BOTANY SEMINAR

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ପଟ୍ଟାମୁଣ୍ଡାଇ , ୨୦ /୧(ଇମିସ): ପଟ୍ଟାମୁଣ୍ଡାଇ କଲେଜ ଉଦ୍ଭିଦ ବିଜ୍ଞାନ ବିଭାଗ ତରଫରୁ 'ସୁପୋଷଣ ଓ ଜଳସ୍ରୋତ ଉପରେ ଏହାର ପ୍ରଭାବ' ଶୀର୍ଷକ ଏକ ଆଲୋଚନାଚକ୍ର ଅଡିଟୋରିୟମ ସଭାଗୃହରେ ଅନୁଷ୍ଠିତ ହୋଇଯାଇଛି । କଲେଜ ଅଧ୍ୟକ୍ଷ ପ୍ରଫେସର ଅଧିକାରୀ ଲକ୍ଷ୍ମୀନାରାୟଣ ଦାଶଙ୍କ ସଭାପତିତ୍ୱରେ ଅନୁଷ୍ଠିତ ଏହି ଆଲୋଚନା ଚକ୍ରରେ ମୁଖ୍ୟ ଆଲୋଚକ ଭାବେ ଏସଏସବି କଲେଜର ଉଦ୍ଭିଦ ବିଜ୍ଞାନ ବିଭାର ବରିଷ୍ଠ ଅଧ୍ୟାପକ ପ୍ରଫେସର ରମେଶ ଚନ୍ଦ୍ର ଦାଶ ଯୋଗଦେଇ ସୁପୋଷଣର ବିଭିନ୍ନ ଦିଗ ଏବଂ ଜଳରେ ବାସ କରୁଥିବା ଉଦ୍ଭିଦ ଓ ପ୍ରାଣୀମାନଙ୍କ ଉପରେ ଏହାର ପ୍ରଭାବ ବିଷୟରେ ଆଲୋଚନା କରିଥିଲେ । ବିଭାଗୀୟ ମୁଖ୍ୟ ଡ. ଅଂଜଳି ଦାଶ ଅତିଥି ପରିଚୟ ଓ ସ୍ୱାଗତ ଭାଷଣ ପ୍ରଦାନ କରିଥିବା ବେଳେ ଡେମୋନେଷ୍ଟ୍ରେଟର ଅଭିମନ୍ୟୁ ମହାନ୍ତି ଧନ୍ୟବାଦ ଅର୍ପଣ କରିଥିଲେ । ଏହି କାର୍ଯ୍ୟକ୍ରମରେ ବିଭାଗର ସମସ୍ତ ଛାତ୍ରଛାତ୍ରୀ ଯୋଗଦେଇଥିଲେ । କାର୍ଯ୍ୟକ୍ରମକୁ ଅଧ୍ୟାପିକା ପ୍ରିୟଦର୍ଶୀ ସାମଲ ସଂଯୋଜନା କରିଥିଲେ ।

ସମ୍ବାଦ - ତା ୨୧.୦୧.୨୦୨୦