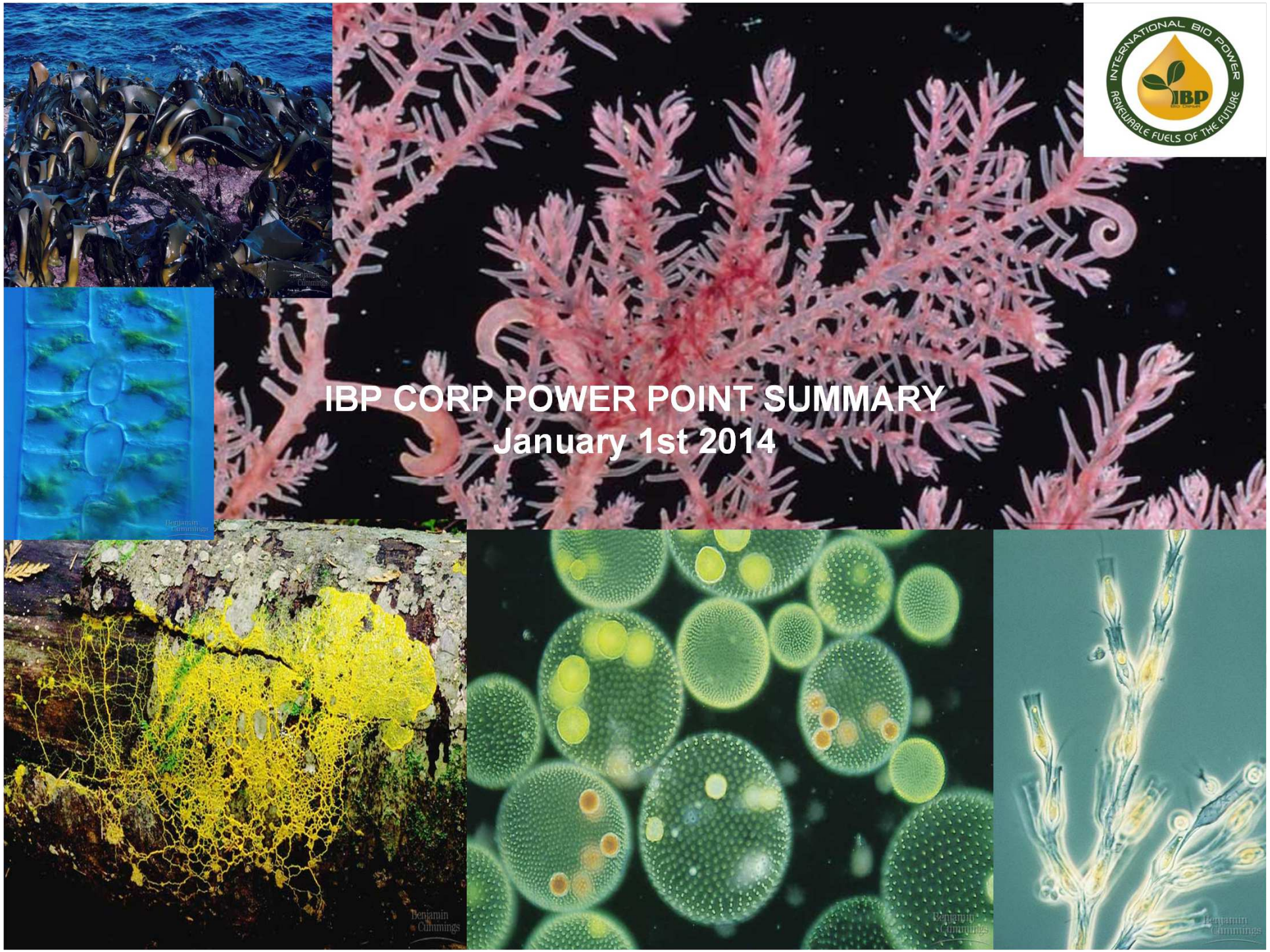

IBP CORP POWER POINT SUMMARY
January 1st 2014
INTERNATIONAL BIO POWER
IBP
RENEWABLE FUELS OF THE FUTURE

INTRODUCTION

1

- **International Bio Power Corporation, is a company founded in 2006 for the purpose of producing organic fuel supply for the best value - price possible, this, together with some strong corporate social responsibility and the corporate culture is the basic pillar for our business structure.**
  the company will be formed mainly by a specialized in microalgae for biodiesel production and organic fuels, and a production plant African palm oil for human consumption, among other subprojects that will benefit the environment.

BACKGROUND 2

- **For years, companies have had to invest a lot of money to produce renewable energy, and sacrifice fertile land and crops such as corn oil, castor oil, rapeseed, soybean, palm, sunflower seed, among many others, just to make fuel ecological.**
  We will produce green fuel in arid land unsuitable for any crop. IBP will exploit microalgae which is not consumed and/or used for human consumption and to be used to produce biodiesel and / or organic fuels, and other products that are mentioned in IBP´s business plan.
- **at the same time, IBP Corp. will build schools, medical centers, with emergency facilities, parking lots and other infrastructure which lacks the area near the premises of the company. IBP corp. will be one of the largest employers in the area.**

3

- **With the oil extraction plant for African palm. IBP Corp., will ensure not to contribute to the creation of world hunger.**
  Today, the renewable fuel market has grown exponentially due to the demand for clean fuels in accordance with the regulations of the Department of Research and Development of Fuel and UN Emissions as well as the Control Department of Emissions of the Spanish government , which has created a high demand for clean fuels that they do not increase the price of global food supply.

4

- **IBP Corp. media operate its own technological infrastructures as well as other entities supplied by market leaders such as ALGA ENERGY of Spain (*www.algaenergy.es*) IBP Corp. will establish their products and services as well as their fundamental business model, aimed at maximum utilization of the latest technology and efficient harvesting of microalgae, the algae oil extraction and the refining of biodiesel from the oil extracted .**
  We have designed our business model with the aim to allow us to build and operate properly and successfully patented a new concept of responsible use of resources to provide biodiesel from microalgae and its products, the whole world. IBP Corp., has established its headquarters in Madrid - Spain and its operations office in Quito - Ecuador, with future operational satellite offices in San Lorenzo-Esmeralda - Ecuador and Santa Elena - Ecuador, where the operative plant will be.

5

- **IBP CORP´s expansion will continue with the creation of offices in major countries where our products will be marketed.**
  Between 2015 and 2025 we estimate a production of 300,000,000 gallons (three hundred million gallons) of biodiesel per year, and it is expected to operate at full capacity.
  Because the productivity of IBP Corp., we expect annual revenues for the year to 2020 will reach $ 165 million (one hundred sixty-five million dollars) and our forecast annual growth will increase significantly each year .

6

- **Now, IBP Corp. is at a point where it only needs the initial funding to launch the project and begin construction of its facilities. IBP has obtained a financing agreement for the project from VITALA GROUP OF COMPANIES, LONDON - UNITED KINGDOM (www.vitalagroup.com), for an amount of $ 420,000,000 (four hundred twenty million dollars) as initial loan capital and total capital loan of up $ 2.5 billion (2500 million dollars) for the entire project through a direct loan to build the infrastructure needed to start production.**

  We have negotiated the construction of infrastructure with Spanish companies like GUIARQ MANAGEMENT PLANNING AND ARCHITECTURE SL based in Madrid.

7

- **Because of the extent of land that IBP Corp. will have in Santa Elena, we will need to run sub-projects that increase the net value of the project and the land, and to guarantee the repayment of the loan in full. These sub-projects, which will occupy about 1,000 hectares. (thousand hectares) each, are:**

  1. - Production of African Red Palm Oil for human consumption.
  2. - Electricity Generation Plant by Capstone Turbine and collection systems and waste Biodigestores for Methane Gas.
  3. - Technology Water Box to capture water desert areas aimed at cultivation and reforestation. (www.groasis.com)
  4. - Reforestation of trees (Melina and similar).
  5. - Planting rubber trees (natural latex).
  6. - Balsa tree plantation.
  7. - Sugar cane plantation.
  8. - Cotton plantation.
  9. - Farmed shrimp and tilapia.
  10. - Yara Organic Fertilizer Factory. (*www.yara.com)*
  11. - Nanocellulose production. (http://en.wikipedia.org/wiki/Nanocellulose)

8

- **"We will have nanocellulose plants to produce abundantly and cheaply." This algae comes from a family of the same bacteria used for producing vinegar, also known as cyanobacteria. These are organisms, their development only require sunlight and water, and would have the advantage of absorbing excess carbon dioxide in the atmosphere, which causes the greenhouse effect**
  The nanocellulose will become a material for the sustainable production of biofuels and many other products.
  According to U.S. government estimates, by 2020 the industry of nanocellulose will move production of some U.S. $ 600,000 million annually.
  12. - relocation of people 2000 people has been taken in consideration with the budget. (two thousand hectares).

9

- **Through Vitala Group of Companies and in its name, will be built in 2000-3000 Villas on the hillside of Santa Elena with Spa, restaurants, riding stables and a golf course of 18 holes with a 5-star hotel in the Santa Elena beach and an international convention center. This project will occupy 2,000 to 3,000 hectares.**
  All projects will occupy a total area of between 12,000 to 14,000 hectares, and having available an area of about 25,000 hectares. (twenty five thousand hectares) to construct the project facilities for the project of IBP´S biofuels.

Location and identification of species of micro-algae Pacific Ocean Marine in Ecuador

10

INT. BIO POWER CORP, has selected Ecuador as its base of operations due to various factors such as:

1. - Ecuador has the highest luminosity factor world. Twelve hours of sun each day, three hundred sixty-five days of the year.

2. - Ecuador has an equatorial and constant climate while in other countries having four seasons.

3. - Due to the geological location of Ecuador there is a proliferation of different coastal and ocean vegetation.

. 4 - The annual average temperature in Ecuador is very stable.

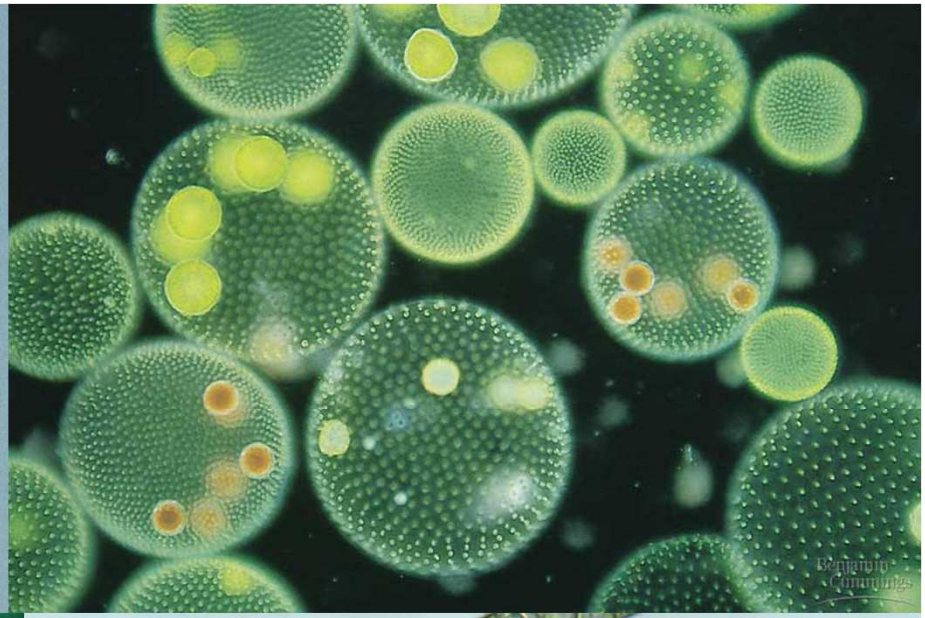
The following are some of the Endemic marine microalgae located in Ecuador in its Pacific Ocean, and which will be our raw material:

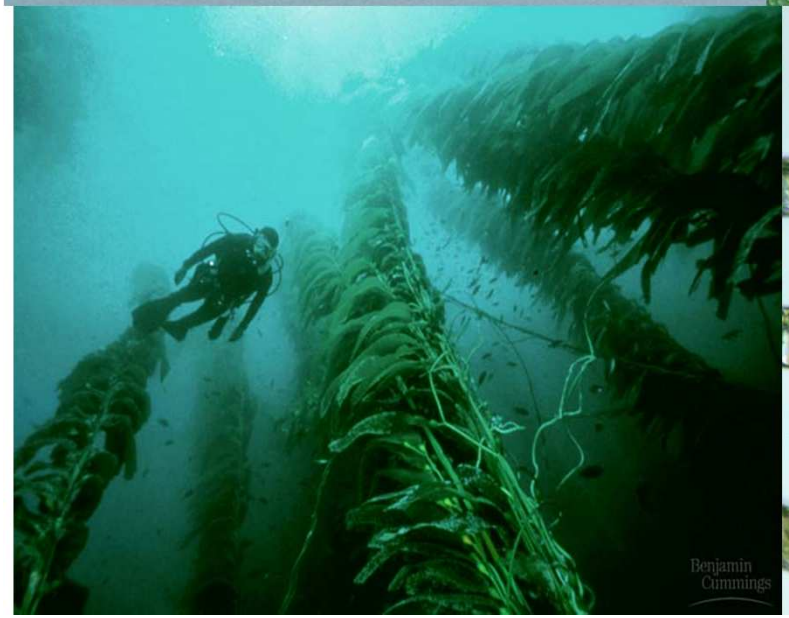
Map of Ecuador

CHARACTERISTICS OF THE MICRO SEA ALGAE

- Ranging in size from microscopic to single celled organisms to large seaweed
- Autotrophic
- Form the reproductive structures – gametangia or gamete chambers
- Aquatic and have flagella at some point in life
- Often contain **pyrenoids,** organelles that synthesis and store starchThallus (haploid)
- Four types of algae
  - Unicellular
  - Colonial
  - Filamentous
  - multicellular

IDENTIFY THE TYPE OF ALGAE





CLASSIFICATION OF ALGAE

- SEVEN PHYLUM BASED ON
  - COLOR
  - TYPE OF CHLOROPHYLL
  - FOOD-STORAGE SUBSTANCE
  - CELL WALL COMPOSITION

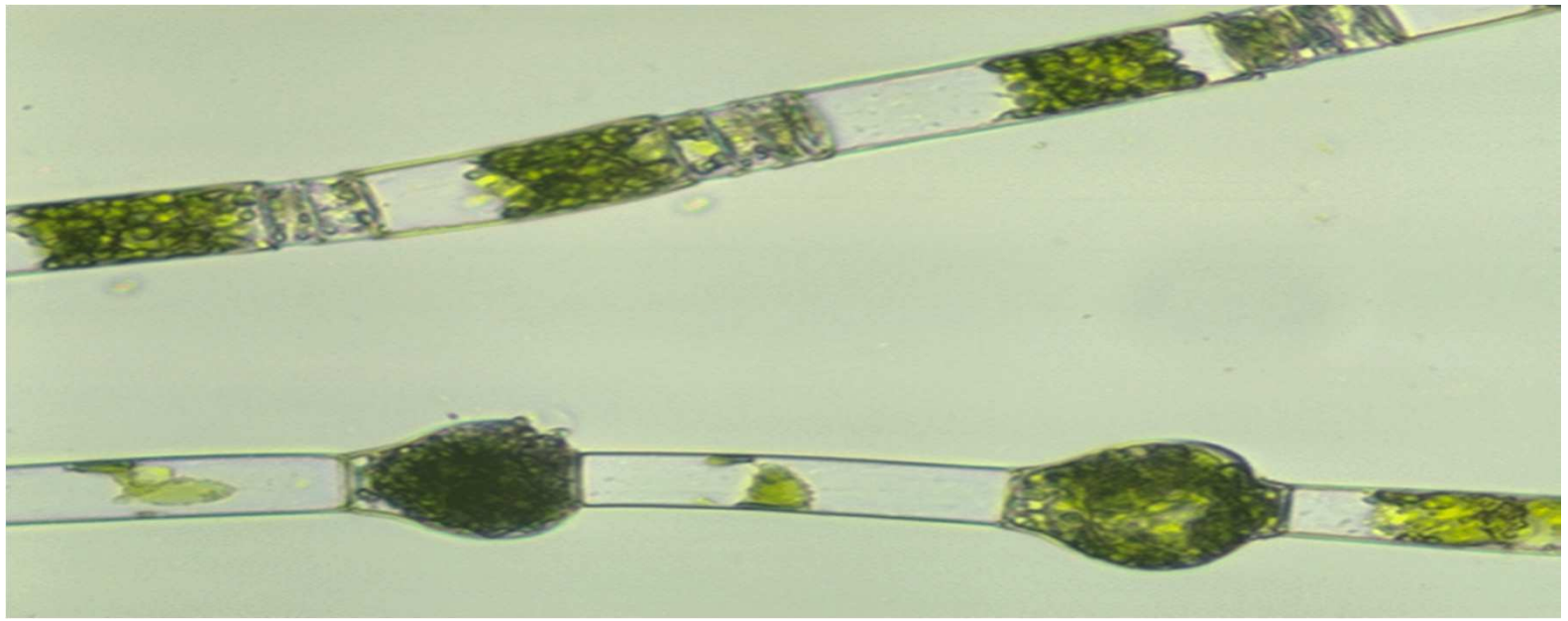
REPRODUCTION

MOST REPRODUCE BOTH SEXUALLY AND ASEXUALLY

- Most sexual reproduction is triggered by environmental stress
- Asexual Reproduction
  - Mitosis
- Sexual Reproduction
  - Meiosis
  - Zoospores
  - Plus and minus gametes
  - Zygospore

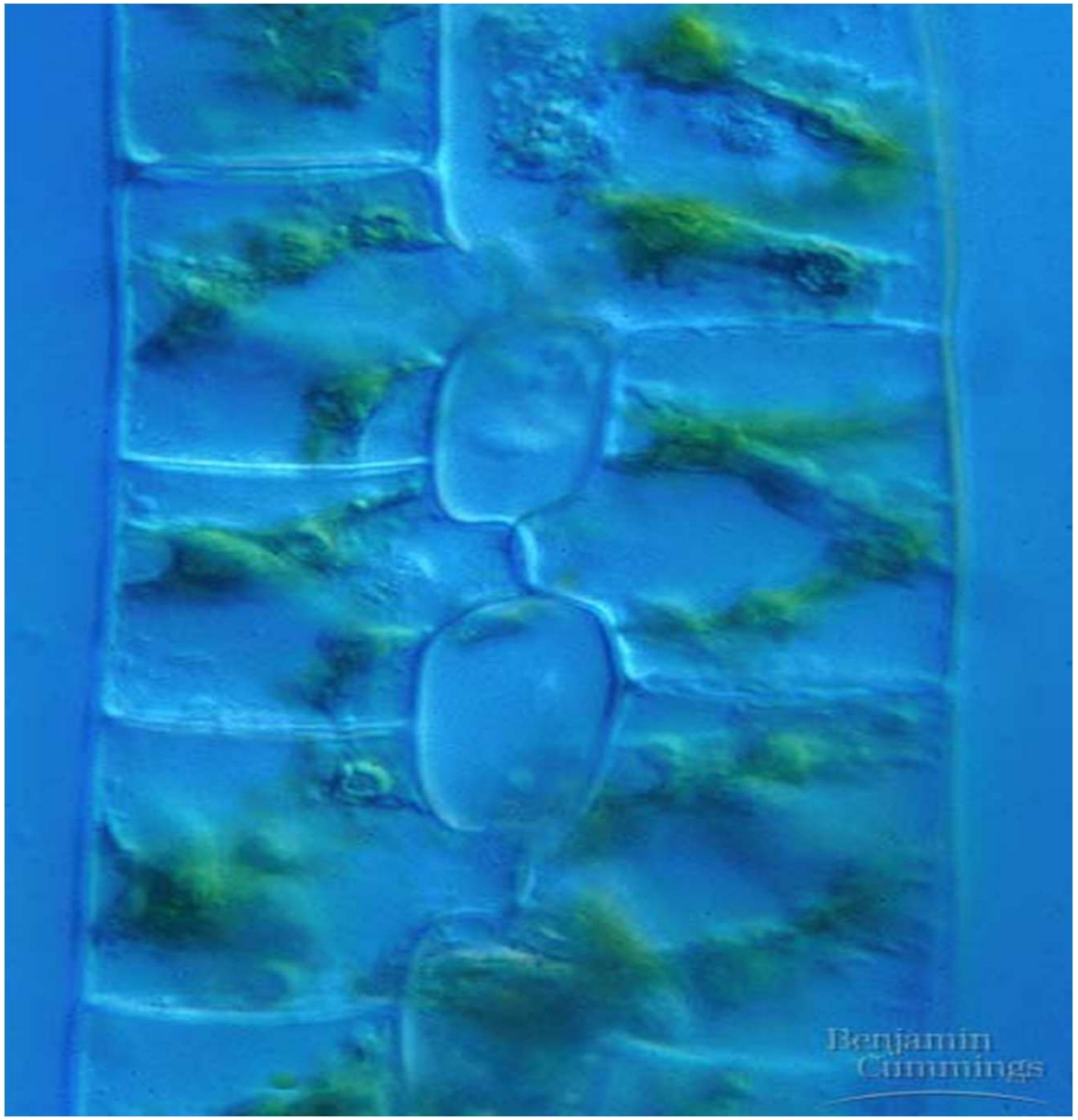
Reproduction in Multicellular Algae

- Oedogonium reproduction
  - Antheridium-release flagellated sperm that swim to the oogonium
  - Oogonium-houses the zygote which is a diploid spore
    - The spore undergoes meiosis and produces 4 haploid zoospores. One of the four cells becomes a rootlike holdfast the others divide and become a new filament.



Marco Algae

Spirogyra reproduce sexually by conjugation



Ulva Reproduces by Alternation of Generations

- Two distinct multi cellular phases- one is haploid and the other is diploid
  - Gametophyte is haploid
  - Sporophyte is diploid
- **Phylum Chlorophyta**
- **Green algae**
- 7000 diverse species
- Biologist reason that green algae give rise to land plants.
- Both green algae and land plants have chlorophyll a and B as well as carotenoids and store food as starch
- Both have walls made of cellulose

Phylum Phaeophyta

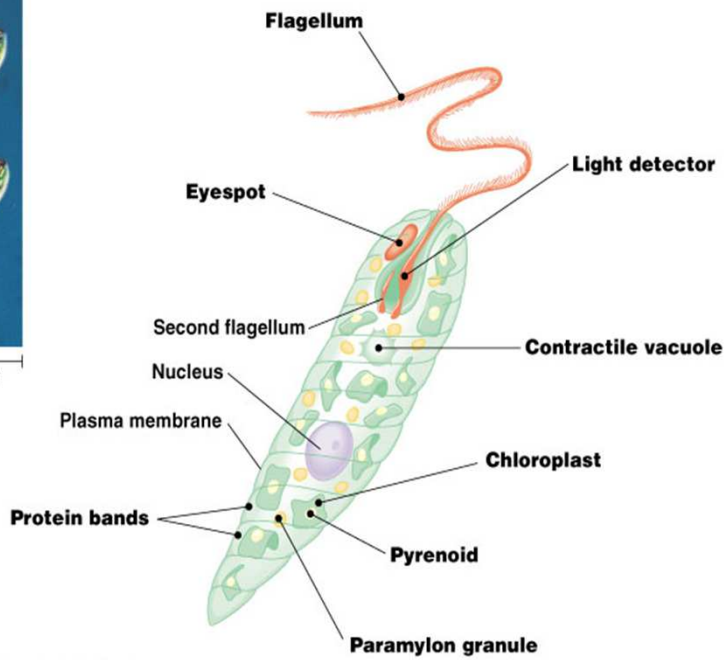
- 1500 species of **Brown algae**
- Mostly marine and include seaweed and kelp
- All are multicellular and large (often reaching lengths of 147 feet)
- Individual alga may grow to a length of 100m with a holdfast, stipe and blade
- Used in cosmetics and most ice creams

Phylum Rhodophyta

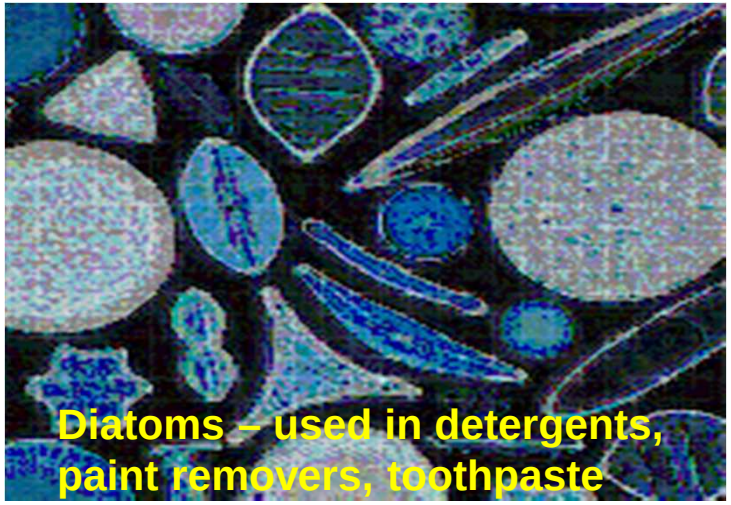
- 4000 species of **RED Algae**
- Most are marine
- Smaller than brown algae and are often found at a depth of 200 meters.
- Contain chlorophyll a and C as well as phycobilins which are important in absorbing light that can penetrate deep into the water
- Have cells coated in carageenan which is used in cosmetics, gelatin capsules and some cheeses

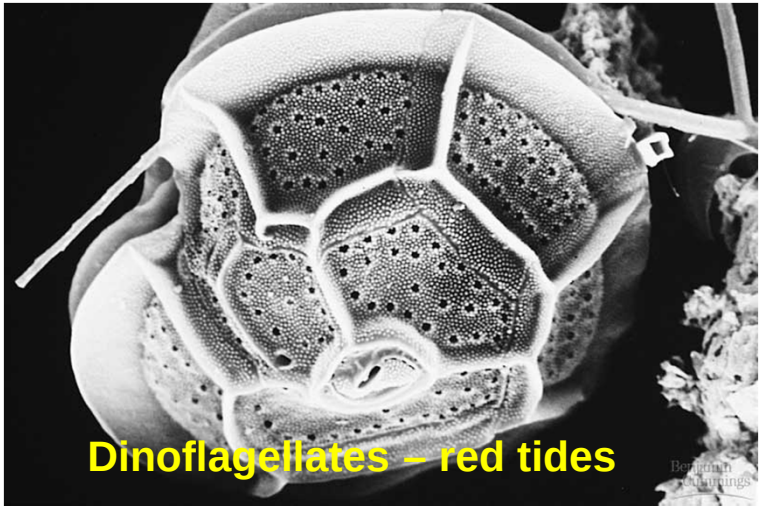
Phylum Euglenophyta

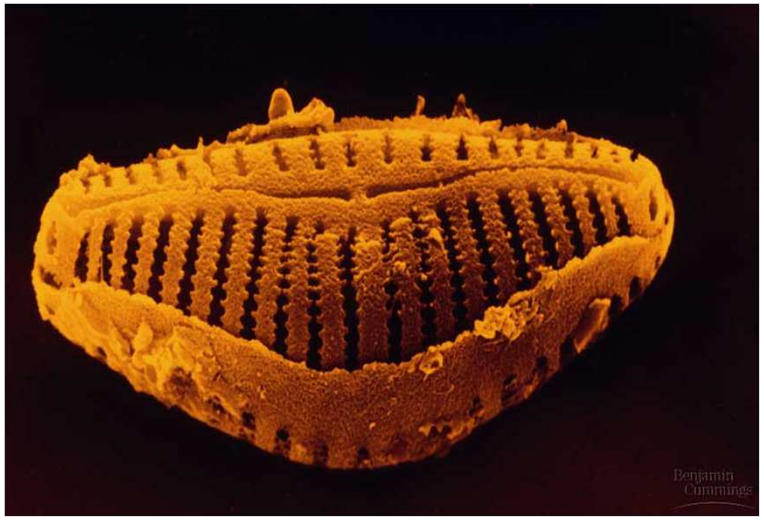
- **1000 species of Euglenoids**
- **Have both plantlike and animal-like c**
- **Fresh water**



Other Phylum Representatives

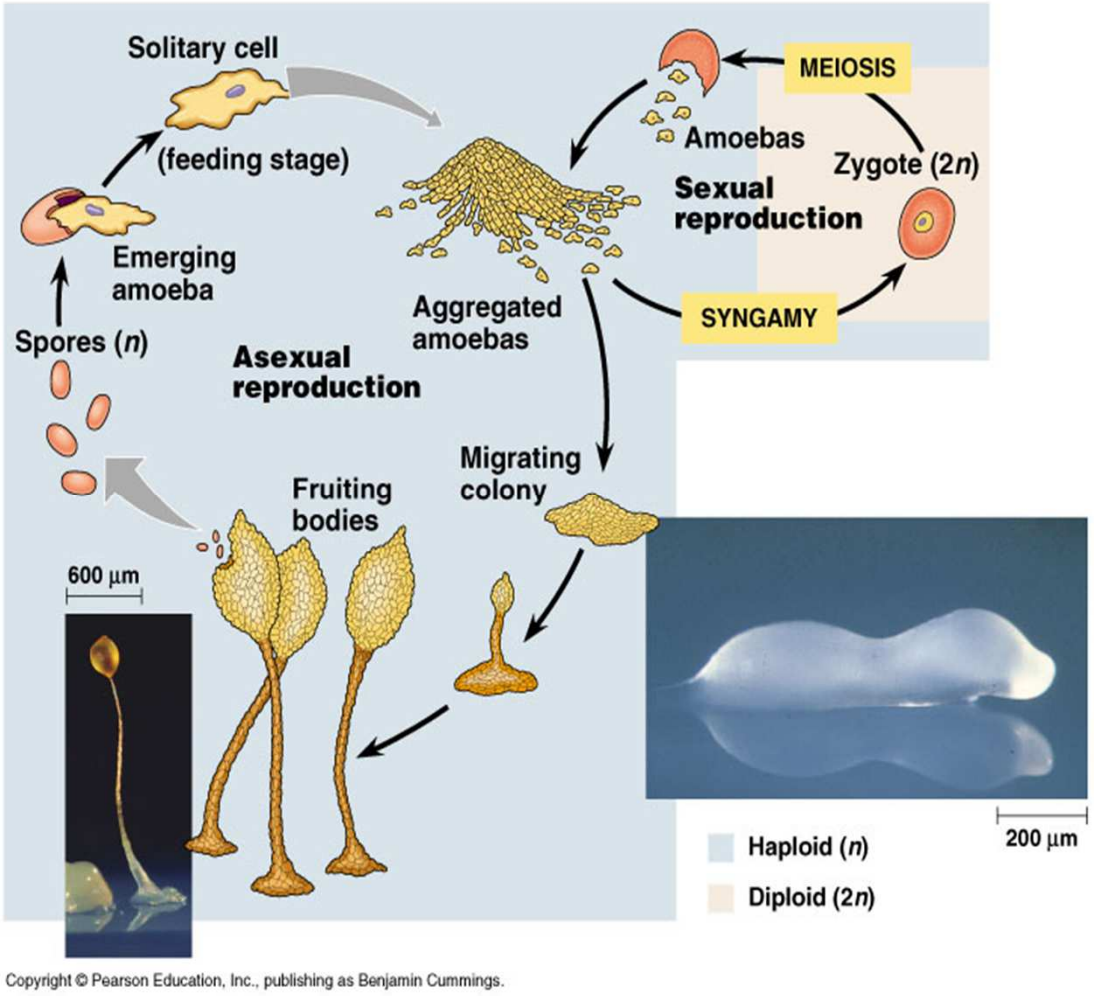






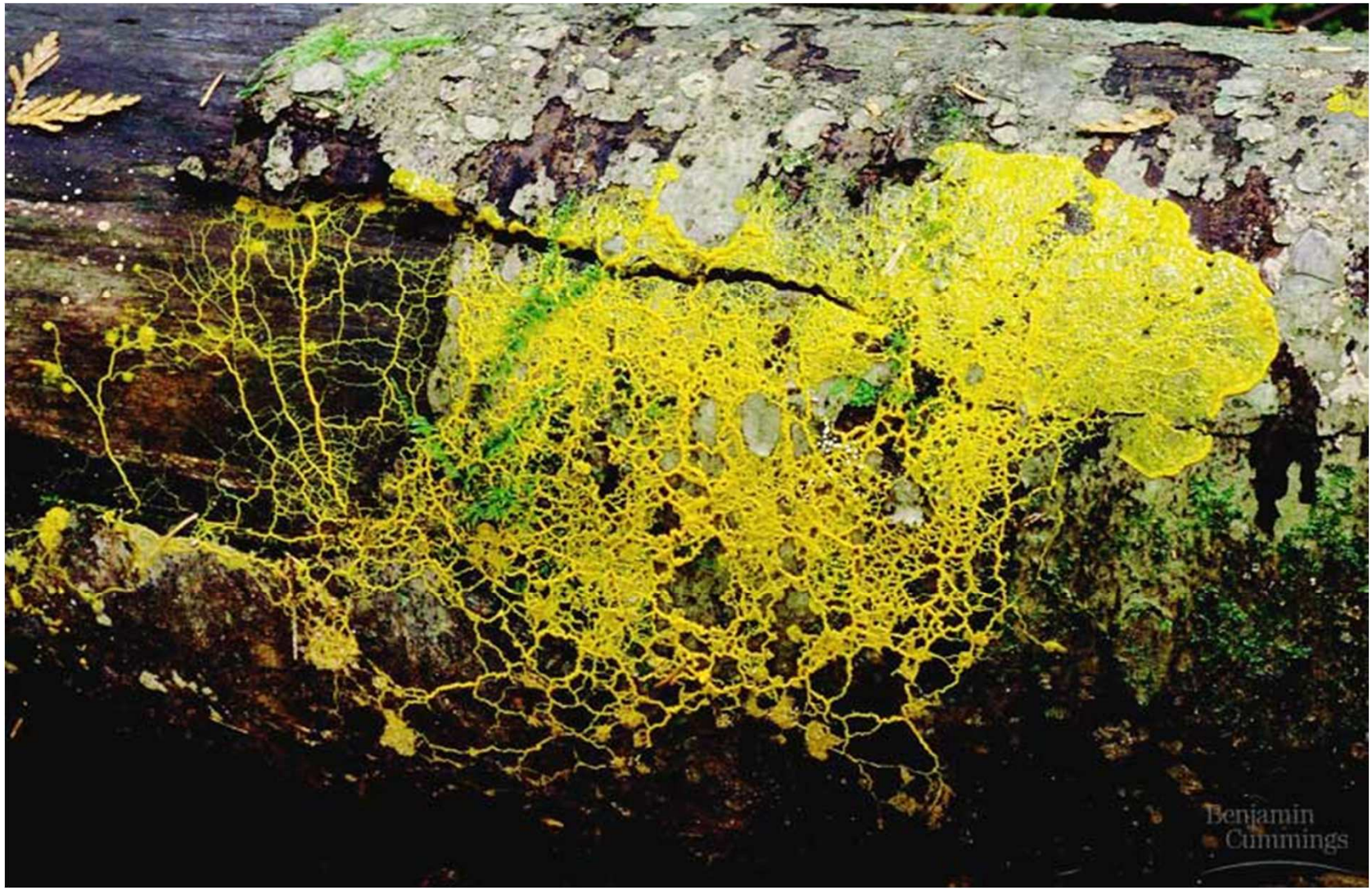
Important in the formation of petroleum products

Funguslike Protist



Cellular Slime molds

Plasmodial Slime Molds



Water Molds