Claims

1. A hydrophilic *Phaeodactylum tricornutum* extract, obtained by or obtainable by:

(i) adding 505.86 g of Phaeodactylum tricornutum frozen biomass to 979 g of water;
(ii) stirring the solution with a magnetic stirrer and heating it to 50 °C;
(iii) adjusting the pH to 4.5 with sulfuric acid and adding 1.1 g of enzyme to the mix;
(iv) after 2 hours of hydrolysis, inactivating the enzyme by heating the solution to 90 °C for 10 minutes;
(v) after cooling, bringing the pH to 5 with sodium hydroxide;
(vi) centrifuging the solution for 20 minutes at 4500 rpm and filtering the supernatant on cellulose plates ranging from 1.5 µm to 0.3 µm;
(vii) filtering the solution on activated charcoal plates and final sterilizing filtration; and
(viii) stabilizing the extract by adding 3% of Minasolve Green B (preservative from Minasolve; mixture of pentylene glycol, sodium benzoate, benzoic acid and water).

2. A hydrophilic *Phaeodactylum tricornutum* extract having the following composition:

- Alanine, lactic acid, proline, glutamine, glycine betaine, asparagine: 26.5 wt%
- Glycerol, uridine, adenosine, guanosine: 16.0 wt%
- Cysteinolic acid: 10.3 wt%
- 2,3-dihydroxypropane-1-sulfonate: 9.3 wt%
- Thymidine: 6.6 wt%
- Glyceryl sulfoquinovoside: 5.4 wt%
- Free fatty acids and betain lipids: 4.3 wt%
- Unidentified components: 21.6 wt%

3. A cosmetic composition comprising the hydrophilic *Phaeodactylum tricornutum* extract of claim 1 or 2.

~~1.~~4. Non-therapeutic method of improving an individual's mood, comprising the step of applying ~~a~~ the cosmetic composition ~~comprising a hydrophilic *Phaeodactylum tricornutum* extract~~ of claim 3 to the individual's skin.

2.5. Non-therapeutic method of treating sensitive skin, comprising the step of applying ~~a~~ the cosmetic composition ~~comprising a hydrophilic *Phaeodactylum tricornutum* extract~~of claim 3 to the skin.

3.6. Method according to claim ~~2~~ 5 for reducing redness in sensitive skin.

4.7. Method according to claim ~~2~~ 5 for soothing sensitive skin.

~~5. Method according to claim 2 for reducing inflammation in sensitive skin.~~

6.8. Method according to claim ~~2~~ 5 for improving the microbiota composition in sensitive skin.

7.9. Method according to any one of claims ~~1~~ 4 to ~~6~~8, wherein the cosmetic composition comprising the hydrophilic *Phaeodactylum tricornutum* extract is applied to facial skin.

8.10. Method according to any one of claims ~~1~~ 4 to ~~7~~9, wherein the hydrophilic *Phaeodactylum tricornutum* extract is an aqueous extract of *Phaeodactylum tricornutum*.

9.11. Method according to any one of claims ~~1~~ 4 to ~~8~~10, wherein the cosmetic composition comprises 0.1 to 10% v/v of the hydrophilic *Phaeodactylum tricornutum* extract, more preferably 0.5 to 5% v/v, and most preferably 1 to 3% v/v.

10.12. Method according to any one of claims ~~1~~ 4 to ~~9~~11, wherein the cosmetic composition further comprises a cosmetically acceptable excipient.

11.13. Use of ~~a~~ the hydrophilic *Phaeodactylum tricornutum* extract of claim 1 or 2 for improving an individual's mood.

~~12. Use of a hydrophilic *Phaeodactylum tricornutum* extract for treating sensitive skin.~~