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.

4. Non-therapeutic method of improving an individual's mood, comprising the step of applying the cosmetic composition of claim 3 to the individual's skin.

5. Non-therapeutic method of treating sensitive skin, comprising the step of applying the cosmetic composition of claim 3 to the skin.

6. Method according to claim 5 for reducing redness in sensitive skin.

7. Method according to claim 5 for soothing sensitive skin.

8. Method according to claim 5 for improving the microbiota composition in sensitive skin.

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

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

11. Method according to any one of claims 4 to 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.

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

13. Use of the hydrophilic *Phaeodactylum tricornutum* extract of claim 1 or 2 for improving an individual’s mood.