

MICROALGAE OPPORTUNITIES IN THE COSMETIC MARKET


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Global Natural Cosmetics Market



"Microalgae opportunities in the cosmetic market"

USD 34 billion (2018)

5.01% (2019-2025)

Skin Care

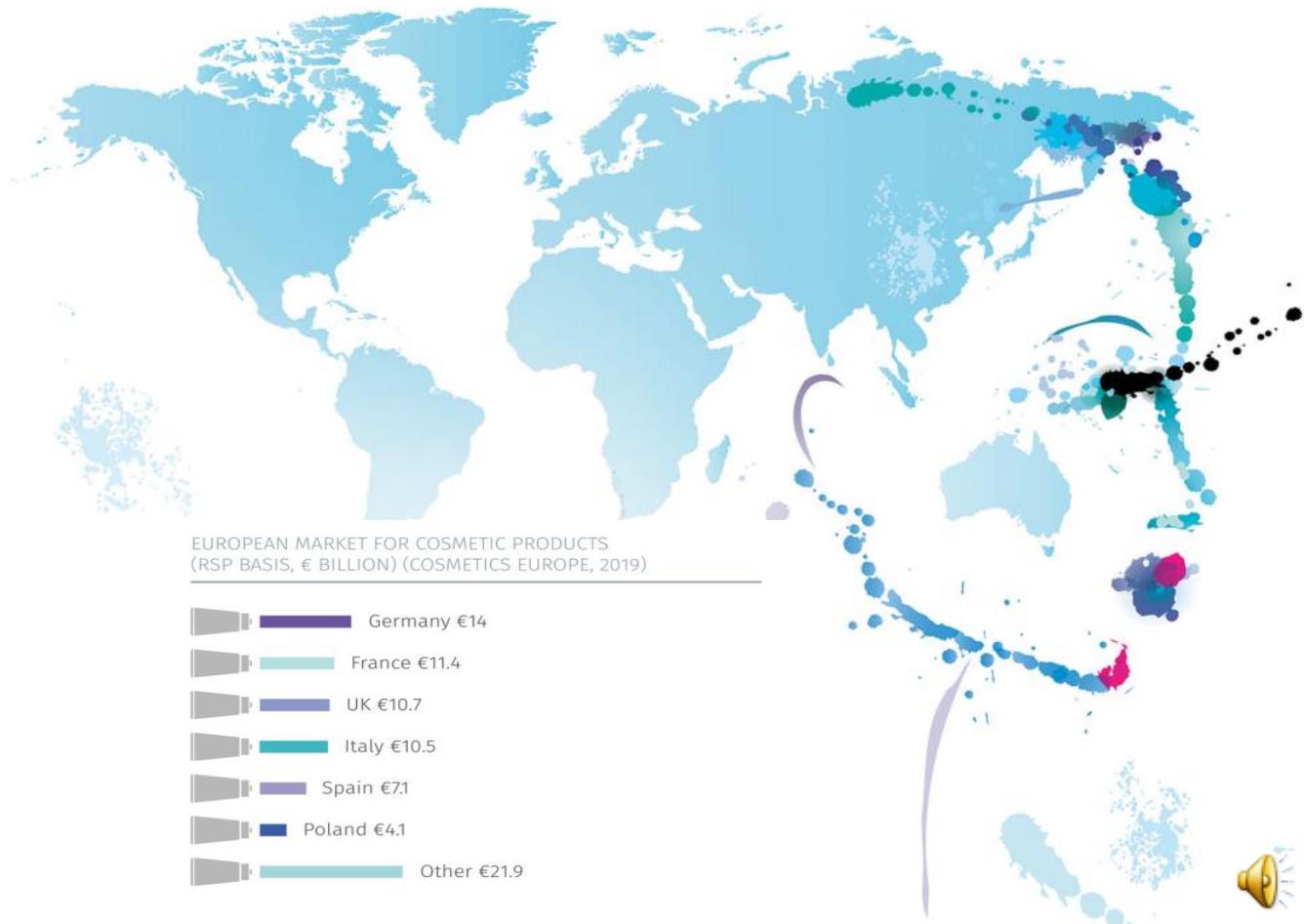
USD 10 billion (2018)

Europe

38.29% of the market (2018)

Asia Pacific

4.42% (2019-2025)





Microalgae: Potential sources of high-value natural components

- ✓ Polyunsaturated fatty acids
- ✓ Polysaccharides
- ✓ Proteins and peptides
- ✓ Carotenoids and phycobiliproteins



Bioactive compounds derived from microalgae: High cosmetic efficacy

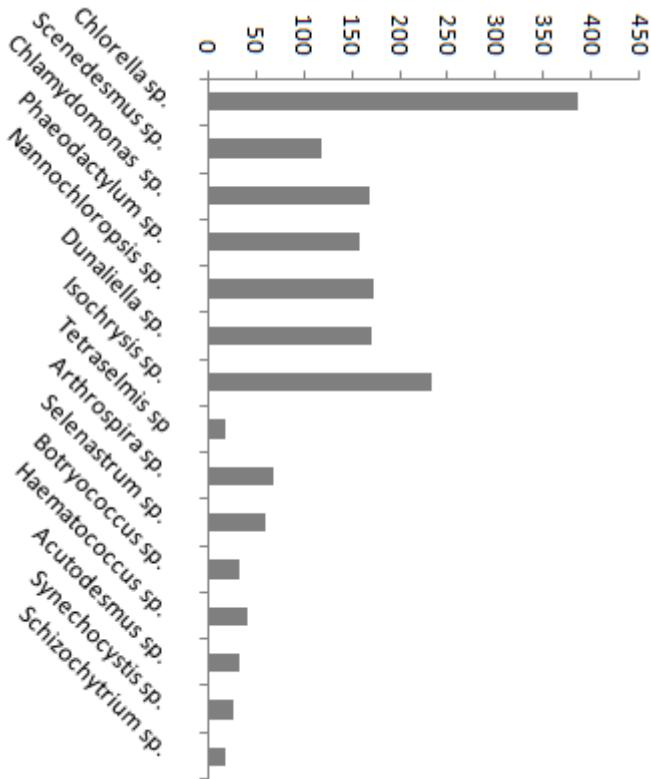
- ✓ Prevent de accumulation of free radicals and reactive oxygen species
- ✓ Erase vascular imperfections
- ✓ Boost collagen synthesis
- ✓ Prevent wrinkle formation eventually



Global Cosmetics Market



Top 15 Microalgae / EAA



Top 15 microalgae and cyanobacteria genera published in the European AA scientific publications
A Bibliometric Analysis of Microalgae Research in the World, Europe, and the European Atlantic Area.
Marine Drugs, 2019, 18, 79

International Nomenclature Cosmetic Ingredients



INCI Name "Extract": *Chorella vulgaris* extract, *Scenedesmus deserticola* extract, *Chlamydomonas hedleyi* extract, *Nanochloropsis gaditana* extract, etc.

No INCI Name: *Selenastrum*, *Acutodesmus* and *Synechocystis*

INCI Name "Oil": *Haematococcus pluvialis* oil, *Schizochytrium limacinum* oil, *Chlorella protothecoides* oil, *Chlorella minutissima* oil

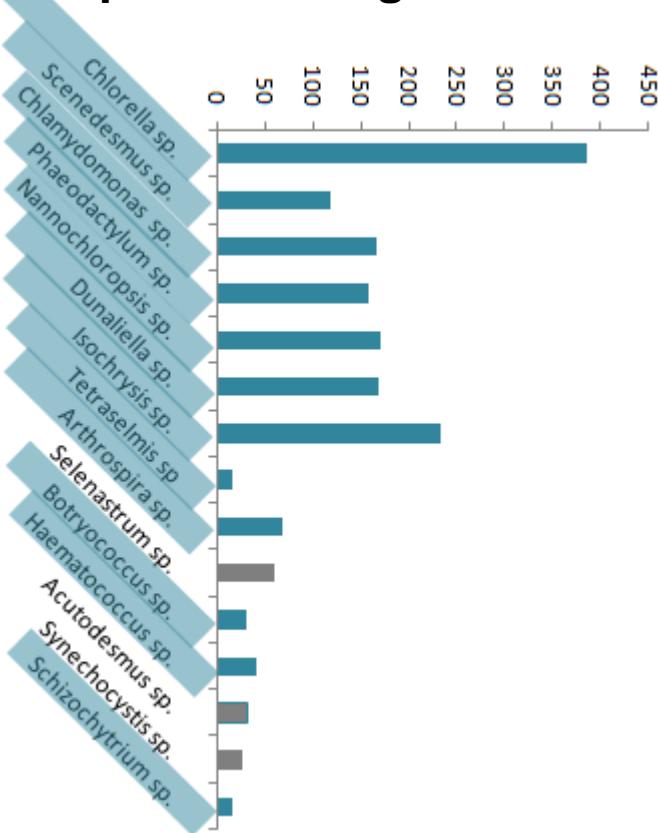
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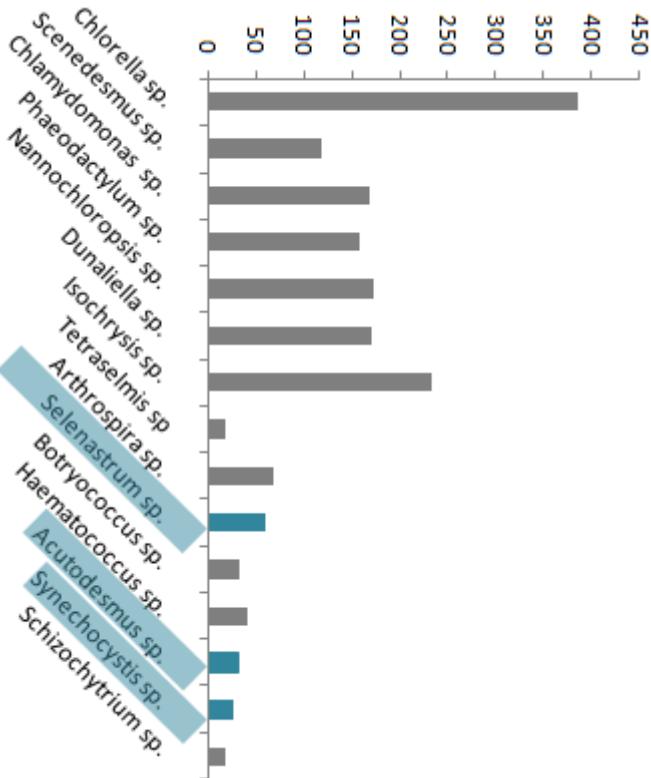
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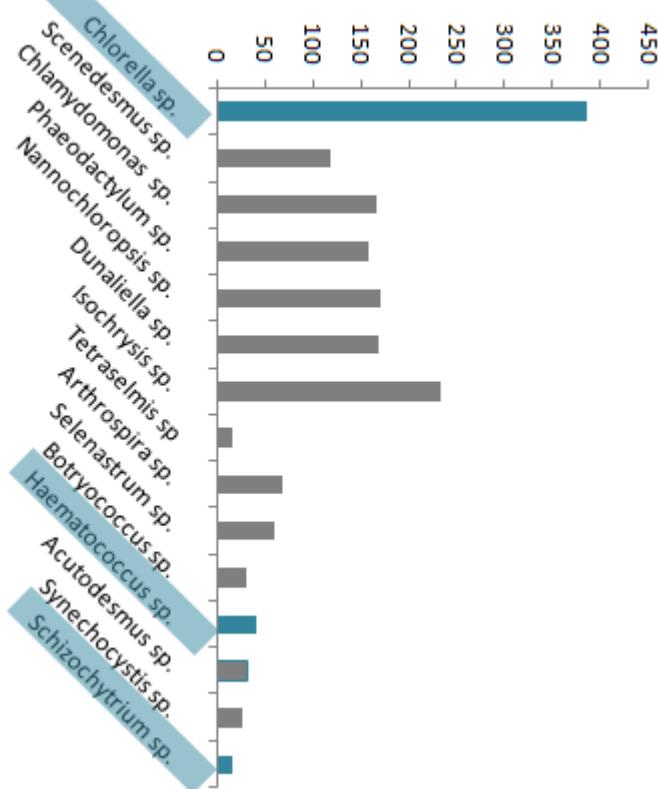
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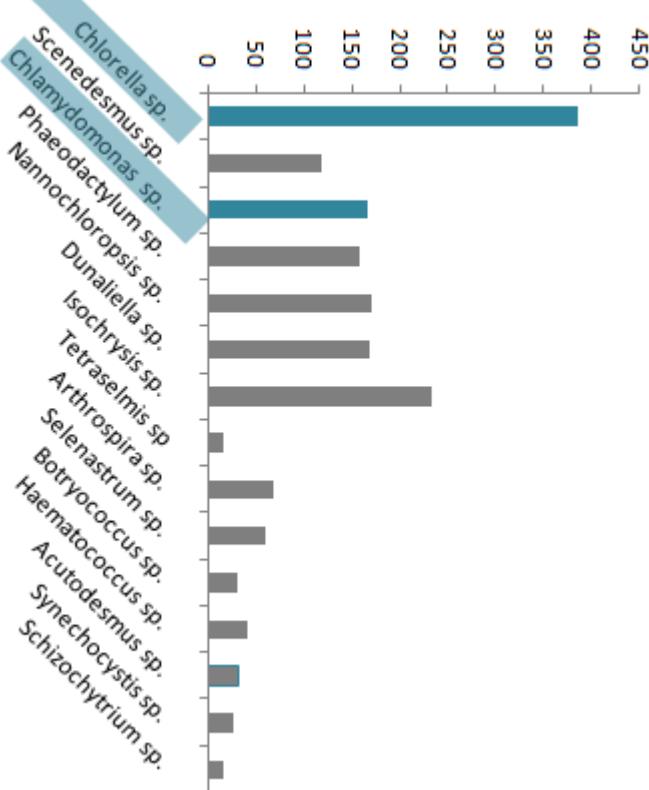
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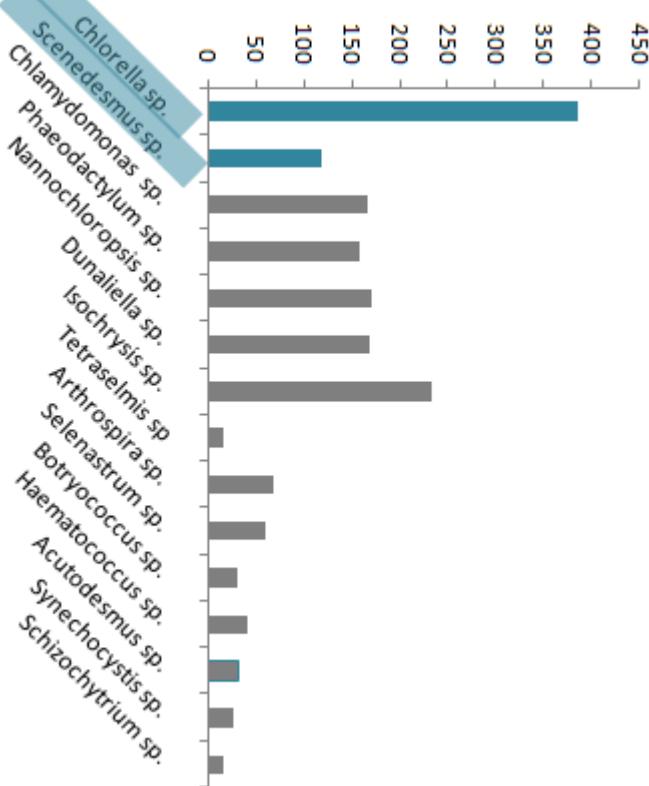
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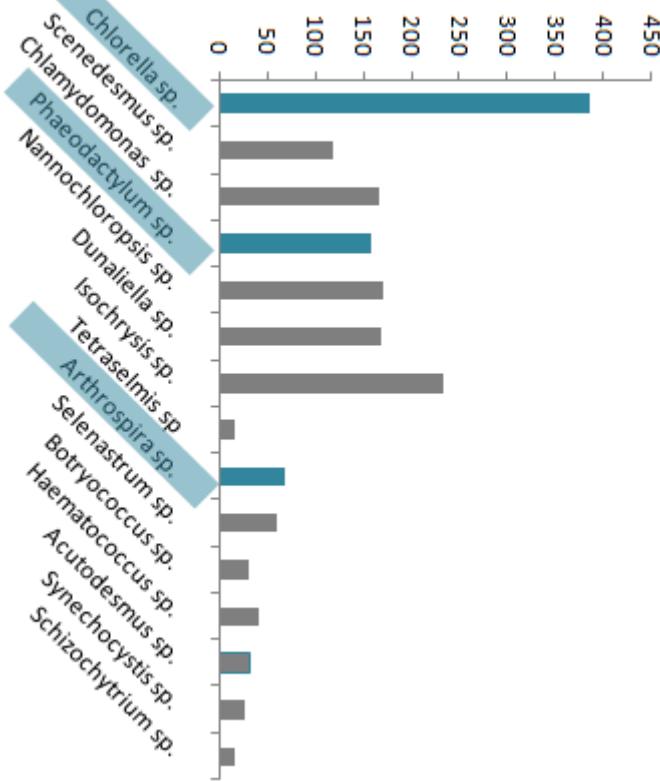
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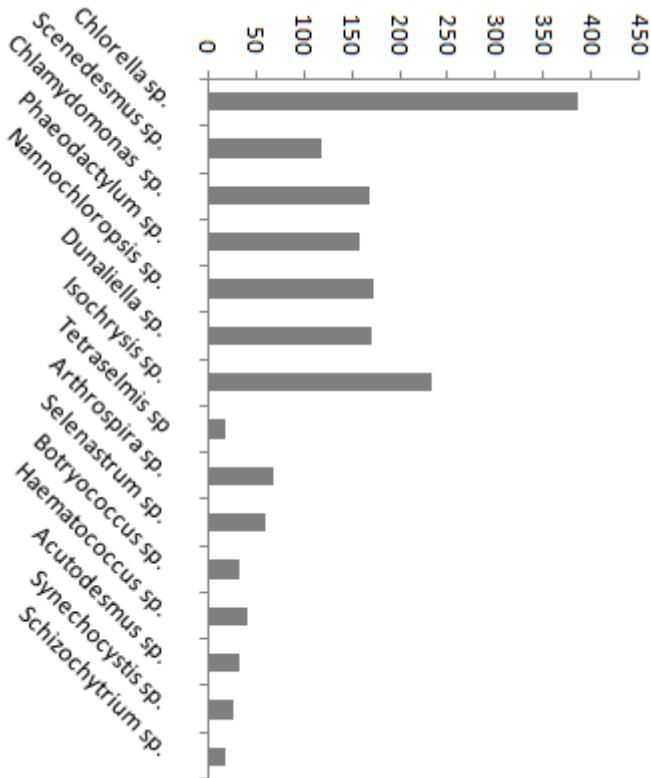
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Fermented Ingredients

The microorganisms release enzymes that break down the molecular structure of the active ingredients into smaller particles.



Bioactive Peptides

Bioactive peptides are released by enzymatic hydrolysis of bigger proteins.





Fermented Ingredients

The microorganisms release enzymes that break down the molecular structure of the active ingredients into smaller particles.



- ✓ Faster absorbed by the skin
 - ✓ Reduces skin irritation
 - ✓ Creates new skin-benefitting compounds and better biological activities



Bioactive Peptides

Bioactive peptides are released by enzymatic hydrolysis of bigger proteins.



The latest trends / New opportunities



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Bioactive Peptides

Bioactive peptides are released by enzymatic hydrolysis of bigger proteins.



- ✓ Ability to reach the deeper skin layers
- ✓ Broad spectrum of cosmetic bioactive properties





in vitro assays for the screening of the cosmetic efficacy of microalgae-derived products:

- ✓ Anti-aging (antioxidant activity: oxygen radical absorbance capacity (peroxyl radicals; hydrophilic and lipophilic ORAC), DPPH scavenging assay, ABTS scavenging assay, ferric reducing antioxidant power, etc.)
- ✓ Anti-inflammatory (COX inhibitory activity)
- ✓ Whitening (tyrosinase inhibitory activity)
- ✓ Anti-wrinkle (neutrophil elastase inhibitory activity, MMP-1 inhibitory activity)
- ✓ Sun protection factor (SPF)





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RESEARCH, DEVELOPMENT AND MANUFACTURE OF TAILOR-MADE COSMETIC INGREDIENTS

Posted by Glecex

The cosmetic world is often changing their formulations to improve the product quality. So, cosmetic producers are keen to search for alternatives and natural active principles for the development of cosmetic products to attain many customers. Microalgae and bioactive compounds derived from ...

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R&D SERVICES IN THE AGRO-FOOD, COSMETICS AND NUTRACEUTICAL FIELDS

Posted by Glecex

GLECEX offers R&D services for developing/optimizing processes to obtain microalgae bioactive extracts, chemical and functional characterizing microalgae derived products and exploring novel industrial opportunities to develop healthier foods and more effective cosmetics. The company also offers the ...

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