

Potential of *Ulva*, *Jania*, and *Padina* Seaweeds as Sustainable Diet

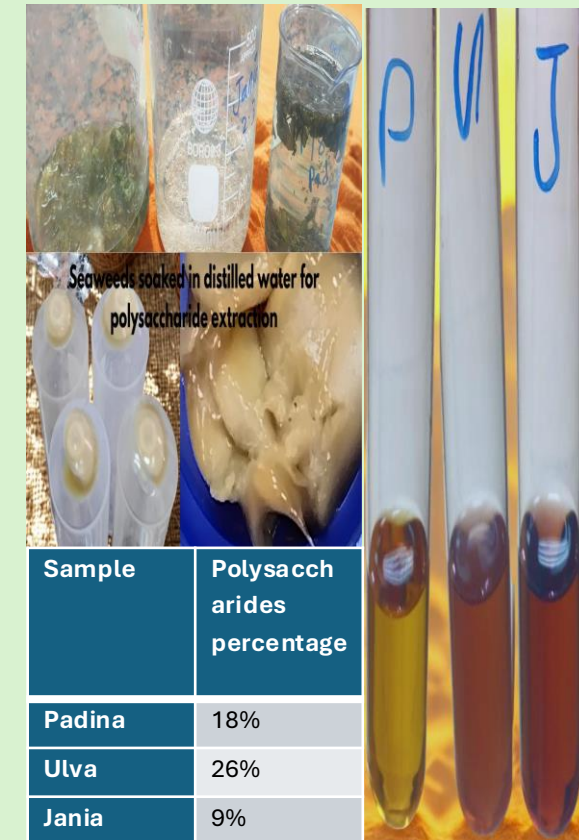
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- Seaweed samples collected from Mediterranean Sea (summer season)
- Analyzed for oil content, total phenolic content (TPC), polysaccharide percentage, and antioxidant activity.



Samples	Dried sample size	Oil weight after extraction	Oil percentage in the samples
Ulva	100.19 g	0.48 g	0.5%
Padina	140.24 g	0.38 g	0.27%
Jania	52.54 g	0.11 g	0.21%



Sample	Color	Antioxidant activity
Padina	Yellow	High Activity
Jania	Violet	No Activity
Ulva	Pale Violet	Slight Activity

Results

- Padina: Highest total phenolic content and antioxidant activity.
- Ulva: Highest oil and polysaccharide percentage.
- Jania: Lowest values for oil, TPC, and polysaccharides, with no antioxidant activity.

Conclusion:

- Padina appears promising due to its highest total phenolic content and highest antioxidant activity.
- Ulva stands out for having the highest oil percentage and significantly the highest polysaccharide percentage.
- Jania had the lowest values in all measured categories (oil, TPC, and polysaccharides) and no antioxidant activity.

