

# Kappaphycus

*Kappaphycus* is a genus of red algae. Species are distributed in the waters of East Africa, Indonesia, Malaysia, Hainan Island, the Philippines, and Micronesia.<sup>[1]</sup>

Genus *Kappaphycus* is “morphologically plastic”,<sup>[2]</sup> with few visible characters that can be used to separate the taxa, so distinguishing the species can be difficult. In addition, many commercial varieties have been bred. Molecular analyses can be used.<sup>[2][3][4]</sup>

In general, these algae have fleshy thalli that grow erect from one or more anchors. The longest individuals can exceed a meter in length. All species produce kappa-carrageenan.<sup>[1]</sup> Farming of this is a large business in the Philippines. Prof. Gavino Cajulao Trono Jr is a Filipino biologist dubbed the “Father of *Kappaphycus* farming”.<sup>[5]</sup>

*Kappaphycus alvarezii* is widely cultivated as a raw source of carrageenan, and other species are used, as well. Several *Kappaphycus* are invasive species.<sup>[6]</sup>

There are about 6 species:<sup>[1]</sup>

- *Kappaphycus alvarezii*
- *Kappaphycus cottonii*
- *Kappaphycus inermis*
- *Kappaphycus malesianus*
- *Kappaphycus procrusteanus*
- *Kappaphycus striatus*

## 1 References

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- [2] Conklin, K. Y., et al. (2009). A molecular method for identification of the morphologically plastic invasive algal genera *Eucheuma* and *Kappaphycus* (Rhodophyta, Gigartinales) in Hawaii. *Journal of Applied Phycology* 21(6), 691-99.
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- [4] Tan, J., et al. (2012). Assessment of four molecular markers as potential DNA barcodes for red algae *Kappaphycus* Doty and *Eucheuma* J. Agardh (Solieriaceae, Rhodophyta). *PLoS ONE*, 7(12), e52905.
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