



This occasional section within the journal surveys visions and achievements, often not on the main track of the developing biomedical sciences, but all relating to discoveries and developments of medicinal – both ancient and modern. What they have in common, in one way or another, is providing further background and glances around the edges of the core discipline of pharmacognosy, as it has been and continues to evolve within our times.

A Recent Study Identified three Marine Natural Products with Potent SARS-CoV-2 Inhibitory Activity

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Whilst the range of SARS-CoV-2 vaccines introduced globally since the start of the current pandemic have dramatically reduced the adverse effects of the disease and stemmed the spread of the virus, there is still a need for chemotherapies to relieve the symptoms of the disease and to further decrease its spread. Traditional medicines may provide drug leads to treat COVID-19 and I have previously highlighted several plant species with promising bioactivities relevant to COVID-19 in this forum.¹ However, the antiviral potential of marine natural products have been largely overlooked. A recent study by a Georgia Institute of Technology research team that was published in the Journal of Natural Products screened an extensive library of natural compounds against SARS-CoV-2 replication in animal cell lines. The group prioritised library compounds that are structurally similar to known antiviral compounds, particularly those with reported activity against other coronaviruses and other RNA

viruses.² Of the library of compounds tested, three were deemed to be particularly promising. The lead compounds were structurally diverse, with a β -carboline alkaloid, a sesquiterpenoid hydroquinone and a mero-diterpenoid macrolide identified, each with noteworthy anti-SARS-CoV-2 activity. Further studies are required to further quantify the antiviral activity of these compounds and to determine their antiviral mechanism.

REFERENCES

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