

# Colorado's new alga may be a source of biofuel production

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A new strain of yellow-green algae, *heterococcus sp. DNI*, which may prove to be an efficient source for biodiesel, has been discovered in the snow fields of the Rocky Mountains. Research examining this new alga, published in *Biotechnology Progress*, reveals that *H. sp. DNI* was found to grow at temperatures approaching freezing and to accumulate large intracellular stores of lipids. *H. sp. DNI* produces the highest quantity of lipids when grown undisturbed with high light in low temperatures.

Algae that can grow in extreme conditions and accumulate lipids are of great interest to industry. The team found that as *H. sp. DNI* produces the highest quantity of lipids when grown undisturbed with high light in low temperatures, it is a potential source of lipids for human nutrition when grown undisturbed, and it has an ideal lipid profile for biofuel production when stressed.

"We have isolated and characterized a new cold-tolerant lipid-producing strain of algae from the [Rocky Mountains](#) in Colorado, US," said Dr. David Nelson. "This may have implications for the commercial production of algal lipids at northern latitudes where the culture of other [algal species](#) is limited or impossible."

**More information:** David Nelson, Sinafik Mengistu, Paul Ranum, Gail Celio, Mara Mashek, Douglas Mashek, Paul Lefebvre, "New lipid-producing, cold-tolerant yellow-green alga isolated from the Rocky Mountains of Colorado", *Biotechnology Progress*, Wiley, [DOI: 10.1002/btpr.1755](#)

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