Novel Compound Discovery in Newly Domesticated Alaskan Kelp

Supported by Alaska Fisheries Development Foundation

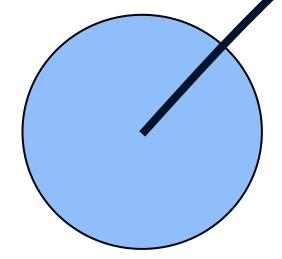


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August 4, 2025
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18 samples 3 species (Novel Kelps) **Detailed Chemistry**

2024 Seaweed Tissue Analysis

Started: April 2024



97 samples 17 species Brown, red, green JIP - Novel Compound Discovery

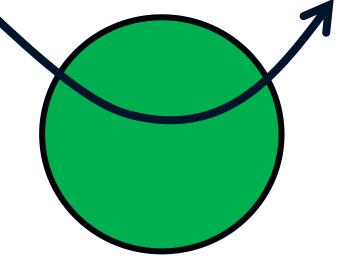
Started: August 2024

Alaska Seaweed-Composition Highway



2025 Seaweed Tissue Analysis

Started: April 2025



Producer Samples (13 Farms) Chemical + Allergen Testing 70 samples







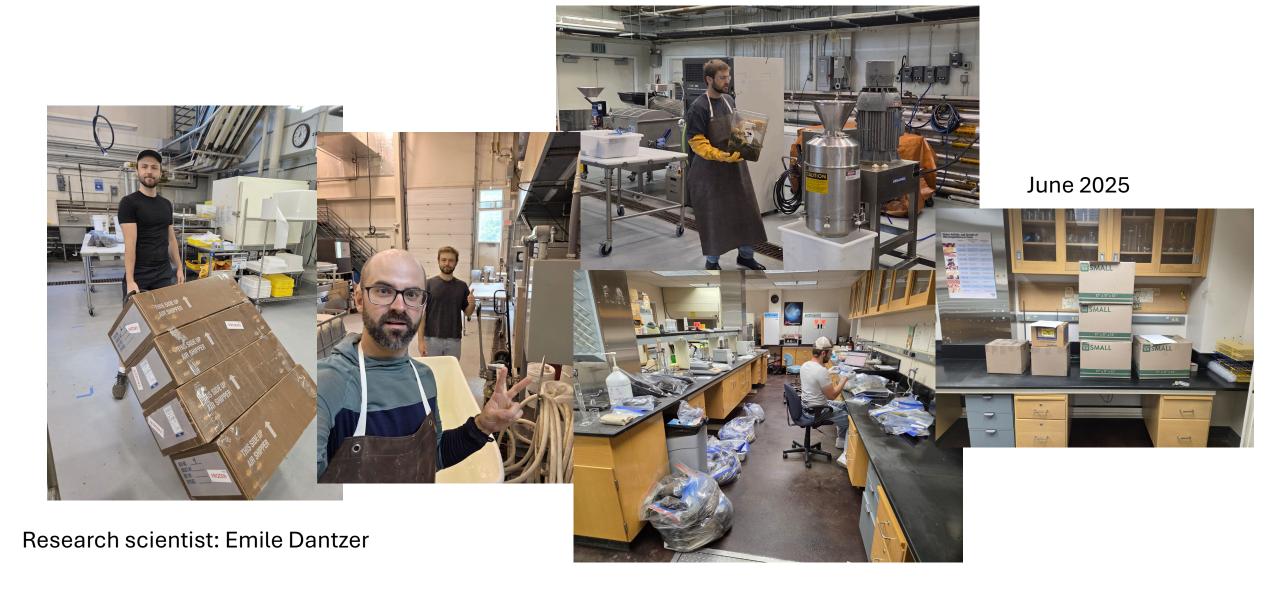
Dragon Kelp Eualaria fistulosa

Split Kelp Hedophyllum nigripes

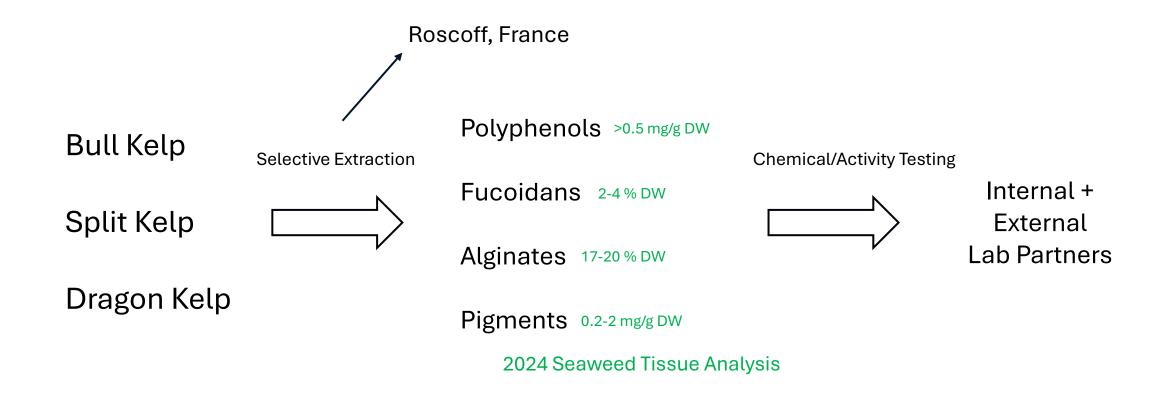
Bull Kelp Nereocystis luetkeana

Step 1: Local farmers (Kodiak) explore cultivation of novel species

September 2024 – May 2025



Step 2: Laboratory setup – seaweed sampling at KSMSC



Step 3: Compound Extraction (Current Stage)

August – September 2025

Objectives

Work ongoing!

Aug-Sept Measure the key chemicals of three novel cultivated seaweeds

Bull, Dragon, Split Kelp

Identify market segments based on chemical compositions

Oct-Dec

Simultaneously

Develop extraction methods to fractionate seaweed