

Belofsky Research

Why Natural Products?

- Track record of success
- Discovery process
- High-demand skills
- Field work component

Rationale for Selection of Organisms of Interest

Ecological: suspected chemical defenses or communication

Geographic: “extreme” or difficult to access environments

Taxonomic: infrequently or never before studied

Ethnographic: traditional or folklore uses

We have been heavily focused on the chemistry of the plant genus *Dalea*, after investigating many different genera using the above rationale.

Some Current Projects:

(Other *Dalea* species are also currently under investigation)

Collaborators: Blaise Dondji and students (CWU, Biology).

Dalea ornata

Status: Manuscript in preparation; ten compounds reported.

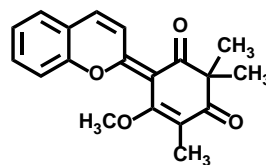
Activity: Anti-hookworm (anthelmintic).



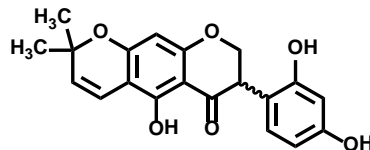
Dalea emoryi (*Psoralethamnus emoryi*)

Status: Compound isolation and characterization is ongoing...

Activity: A compound that is quite active against hookworm has been revealed, the known compound dalrubone:



We also discovered a new compound we named emoryan that is weakly active:



chromatography column showing the purification of dalrubone