

# Fall 2023 Update on Arid Land Research Fund - Mining Disturbance Revegetation



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## The Problem – Revegetating Mine Disturbance Can Be Difficult

Millions of dollars are spent every year in revegetating mining disturbance

These efforts are not always successful - it can be very difficult to re-establish vegetation in the semi-arid US Southwest – Bingham Canyon waste rock heaps seen here have stubbornly resisted all attempts at revegetation since 1906

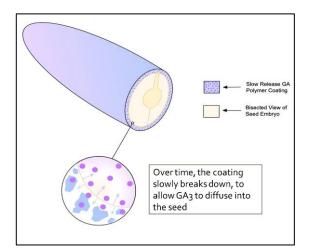


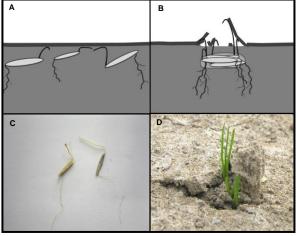
Historic Waste Rock Heap, Bingham Canyon Mine, UT

## A Solution - Nevada Miners Are Backing UNR's "Coated and Pelletized Seeds Technology"

Coating and pelletizing greatly improves the ability of seeds to re-establish:

- 800% increase in germination through scarification and pelletizing of Sand Dropseed
- 400% increase in establishment of Indian Ricegrass
- 300% increase in establishment of grasses treated with fungicide coatings





Gibberellic Acid Coated Seed

Pelletized seeds can break through hardpan

### **UNR's 5-Year Coated and Pelletized Seed Research Program**

- A 5-year program to test proprietary Indian ricegrass seed coatings, utilizing timereleased gibberillic acid, was initiated near Tonopah in Southern Nevada in early 2023
- Early results in 2023 confirmed a significant increase in germination with coated seeds
- Test plots are now being established on un-rehabilitated drill pads at Tonopah to optimize the best seed coatings for commercial use
- Testing will continue through spring/summer of 2024, followed by large-scale trials in 2025 and 2026



• Coated seeds are targeted to be commercially available by 2026

Planting Coated Seeds on A Drill Pad, Tonopah, October 2023

### **UNR Appreciates the Financial Support of:**

American Lithium Centerra Gold Century Lithium Fortitude Gold Pan American Energy West Vault Mining

Financially support the Arid Land Research Fund at:

o https://www.unr.edu/cabnr/arid-lands-research-fund

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