

SERDP PROJECT OF THE YEAR ENVIRONMENTAL RESTORATION

PHYTOREMEDIATION FOR THE CONTAINMENT AND TREATMENT OF ENERGETIC AND PROPELLANT MATERIAL RELEASES ON TESTING AND TRAINING RANGES

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SUSTAINABLE RANGE MANAGEMENT OF RDX AND TNT BY PHYTOREMEDIATION WITH ENGINEERED PLANTS

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To maintain military readiness, troops training on Department of Defense ranges use live munitions, which deposit energetic materials on the ground. These energetic materials can leach into the soil and potentially migrate into the groundwater. Past studies have shown that phytoremediation could play a role in cleaning up contamination and preventing migration of contamination to areas surrounding ranges.

Addressing natural and engineered plants respectively, Dr. Jerald Schnoor and Dr. Neil Bruce and their research teams developed new capabilities for degrading and containing energetic materials such as RDX and TNT. The findings from these projects provide the molecular insight and knowledge needed to make more effective and efficient use of phytoremediation on military training and testing ranges.

For more specific information about these projects, stop by Poster #177 and Poster #190.