

## ***ESTCP PROJECT OF THE YEAR***

### **IMPLEMENTATION AND COMMERCIALIZATION OF NEW GERMPASMS FOR USE ON MILITARY RANGES**

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Military training installations are some of the most intensively used lands in the United States, and heavy tracked and wheeled vehicular traffic can be destructive to vegetation. Most grasses cannot stand up to the wear and tear of military training. The military mission requires that vegetation be as resilient as possible to training and at the same time meet environmental requirements. Damage to vegetation reduces training realism and the carrying capacity of the land and causes the loss of valuable topsoil.

Mr. Antonio Palazzo in collaboration with colleagues at the U.S. Army Corps of Engineers and the U.S. Department of Agriculture-Agricultural Research Service has demonstrated, using standard horticulture breeding techniques, that it is possible to develop new cultivars and germplasms that can withstand the rigors of military training. His recent SERDP-funded plant breeding studies are providing improved, more resilient native and introduced plants that establish themselves more rapidly and return the land more quickly to a state ready for military training. These plants also have benefits for many non-military land uses and are being demonstrated to federal, state, and regional land managers as well as representatives of seed companies. Under this ESTCP project, large-scale demonstrations were conducted at Fort Drum, New York; Yakima Training Center, Washington; and Camp Guernsey, Wyoming.

Resilient cultivars of three western range grasses able to withstand disturbance by tracked and wheeled military vehicles and, in some cases, to resist invasive plants are now transitioning to field use. Seed has been distributed to military facilities in the Intermountain West. To expand implementation, seed for the 'FirstStrike' slender wheatgrass is in commercial production. Using guidance manuals developed under this project, military land managers will be able to seed less frequently because of increased establishment rates and better resiliency, enhance methods for controlling invasive species, arrange training schedules more effectively, and reduce cost and time requirements for maintaining and sustaining military training lands.

*For more specific information about this project, stop by Poster #102.*