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## SCREENING MONTANA NATIVE GRASS SPECIES FOR RESISTANCE TO SPOTTED KNAPWEED EXUDATE CATECHIN (POSTER)

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It has been reported that catechin is an exudate of spotted knapweed (*Centaurea maculosa*). Documented to have chelating, antimicrobial and phytotoxic properties, catechin is believed to contribute to spotted knapweed's ability to displace native plant communities. Originating in Europe, it is considered an invasive species in the Western United States and is recorded to have established populations in all fifty-six counties in Montana. Select plant species in Europe have demonstrated resistance to catechin without community displacement. It is hypothesized that the degree of resistance to catechin of neighboring plant species determines the degree of knapweed invasiveness. Using agar plates and several Montana grassland species, a bioassay was created to assess the degree of resistance of native grassland seeds to catechin. Assessed through percent germination, root length, and shoot length, the degree of resistance for each species was assessed. Identifying a Montana native grassland species with catechin resistance could provide potential means for knapweed prevention.