# Impact of Turfgrass Cultural Practices on the Development of Tufted Hardgrass. (C05-fagerness095916-Oral)

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### **Abstract:**

Greenhouse studies were initiated in fall 2001 to investigate the effects of various cultural practices on development of tufted hardgrass, a winter annual grass found in the southern Great Plains. Hardgrass is a prolific seed producer that thrives under compacted soil conditions common to heavily trafficked turf areas. One study was conducted to investigate the effects of variable mowing height on hardgrass development and seed production while the other investigated the effects of hardgrass planting density, variable fertility, and perennial ryegrass overseeding on the same parameters. Results showed that, while increased mowing height linearly resulted in increased hardgrass seed production, significant seed production was still feasible at mowing heights as low as 5 cm. Both increased hardgrass planting density and the competition from overseeded perennial ryegrass significantly reduced hardgrass seed production. Increased fertility resulted in greater hardgrass seed production in samples not overseeded with perennial ryegrass. Overseeded samples did not respond equally to similar increases in fertility, due to the competitiveness of perennial ryegrass for the same nutrients.

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