Increasing Tissue Potassium with Increasing Rates of Macro-Sorb Quelant-K $_{low\ pH}$

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Summary:

The objective of this study was to determine how two rates of Macro-Sorb Quelant®-K $_{low\ pH}$ influence tissue levels of potassium in tall fescue (Festuca arundinace L.) turfgrass plants. Research plots were set up at Colbert Hill Golf Course in Manhattan, Kansas on a tall fescue turfgrass stand. Macro-Sorb Quelant®-K $_{low\ pH}$ was applied at rates of 2.0 or 4.0 fl oz/1000 ft^2 and was applied on 5 day intervals for a total of 3 applications. Five days after the final applications, leaf tissue samples were collected from each plot and sent to Kansas State University Soil and Plant Tissue Diagnostics Lab for potassium analysis (Figure 1.). Following applications of Quelant®-K $_{low\ pH}$ at 2.0 and 4.0 fl oz/1000 ft^2, leaf tissue potassium increases by 9 and 14 percent, respectively. With the addition of Macro-Sorb amino acids, foliar applications of Quelant®-K $_{low\ pH}$ efficiently increases potassium concentrations within leaf tissue. Potassium is a key nutrient in maintaining turgor pressure in turfgrass plants; therefore, maintaining adequate levels in leaf tissue will aid in to drought tolerance, cold hardiness, and other abiotic stresses. Results from this research indicate that Quelant®-K $_{low\ pH}$ is a very effective product for supplying turfgrass plants with potassium.

Figure 1. Leaf Tissue Potassium increased by 9 and 14 Percent (%) following applications of Macro-Sorb Quelant®-K $_{low\ pH}$ at 2.0 and 4.0 fl oz/1000 ft^2, respectfully.