Applications of Precision Agriculture for PNW Growers

F.J. Pierce
Center for Precision Agricultural Systems

Abstract

Precision agriculture should be viewed as a set of technologies and scientific principles that can be integrated into management systems designed to improve all aspects of food and fiber production. After more than a decade since precision agriculture emerged on the U.S. agricultural scene, there are, as yet, no complete “precision agricultural systems”; rather there exists a bundle of various technologies and management practices from which agricultural producers can choose to incorporate in their farming operation. The promise of precision agriculture is to increase efficiencies in managed inputs, to improve crop yield and quality, and to ensure soil, water and air quality. The extent to which farmers have benefited from precision agriculture has varied from very little to very significant. For the most part, the technologies and the detailed information they provide do not directly provide value. Rather, it is the management decisions made as a result of these that provide value to farmers. This presentation will highlight recent technological advances in precision agriculture and how they are being applied to crop production systems in the Pacific Northwest.