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Double cropping soybean with small grain in the Mid-Atlantic USA

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Double cropping small grain and soybean simultaneously addresses world food and feed demand by growing two crops in one year and environmental concerns by maintaining a continuous green ground cover. Depending on location and year, the double-crop system has been used on 15 to 60% of the soybean hectares in the Mid-Atlantic region of the United States. Although historically more profitable than single-crop soybean, double-crop soybean tends to yield 10 to 30% less due to late planting. The yield difference is primarily due to the inability of double-crop soybean to develop adequate leaf area in the shorter growing season. Therefore, recommendations emphasize strategies to 1) position the soybean crop for a longer growing season, 2) grow more leaf area during the short vegetative and early reproductive stages, and 3) protect the leaf area from defoliation and disease. With funding from the United Soybean Board and Qualified State Soybean Boards, the Mid-Atlantic States are conducting research and extension projects with the goal to increase yield and profitability of double-crop small grain-soybean systems. Objectives include: 1) creating a database/clearinghouse of knowledge, research, and Extension recommendations for double-crop soybean production in the Mid-Atlantic; 2) developing a coordinated Mid-Atlantic on-farm research structure to discover, validate, and increase the use of environmentally responsible double-crop practices; 3) researching practices that lead to earlier small-grain harvest without adverse effects on yield, providing for an earlier planting date for double-crop soybean; and 4) investigating numerous site-specific practices that may improve the system. A history of the Mid-Atlantic U.S.A. double-cropping system and summary of efforts to improve the system were presented.