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(Note) White Speck Consistently Quantified by Image Analysis

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White specks are undyeable, undeveloped fiber communities on dyed and finished cotton (*Gossypium hirsutum* L.) fabrics. These specks currently are not quantifiable for comparison purposes. In order to remove the subjectivity from dye defect classification, image analysis was evaluated as a means to accomplish white speck detection. Of the wide variety of imaging software that exists, the Optimas system was best suited for this application. Two sets of cotton fabrics were evaluated for their white speck content. One study involved eight plain-weave fabrics, each with visually distinct levels of white speck content. This study was used primarily to identify the system, software, and technique best suited for white speck quantification. The second study verified the system, software, and technique using 35 filling-face sateen fabrics. Compared with the eight fabrics, the 35 had subtle differences in white speck levels. The imaging system was consistent on several dates of testing.

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