Effect of application pressure and water volume on azoxystrobin concentration on peanut foliage and soil.

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Applications of azoxystrobin (Abound FL at 24.6 oz/acre, banded) were made to a Spanish peanut cultivar with pressure set at 20, 40, 60, or 80 PSI at a water volume of approximately 30 gal/acre; and at a pressure of 20 PSI and water volumes ranging from 30 to 111 gal/acre using a teejet 8010 flat fan nozzle tip. Applications were made on 24 July, 7 August, and 16 August. After two irrigation events, foliage from several plants in the center of the plot were sampled from top to bottom in a 6-inch diameter from the stem, and the soil to a depth of 4-inches and centered under the stem were mixed together and combined in a sample. Sample were frozen and sent to Omic USA Inc. (Portland, OR) for analysis of azoxystrobin concentration. The concentration of azoxystrobin in the soil to a 4-inch depth did not change as application pressure increased. However, as water volume increased to ≥54 gal/acre, there was a lower concentration of azoxystrobin in the soil relative to application at 30 gal/acre. Increasing the volume of water to ≥ 54 gal/acre also resulted in a lower concentration on the foliage, compared to 30 gal/acre, whereas increasing application pressure had little impact on azoxystrobin concentration on foliage. Increasing water volume to ≥54 gal/acre may have resulted in the fungicide being leached out below the pod zone.