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Interactions Between Pecan Aphids, Ants and Lady Beetles in the Pecan Orchard

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ABSTRACT

Lady beetles are important predators of aphids on pecan trees. The lady beetles are deterred by red imported fire ants. Ants were more destructive to convergent lady beetles than to Asian lady beetles. Defensive behaviors of Asian lady beetles against attack by red imported fire ant include reflex bleeding, cessation of walking, and biting the ants. Convergent lady beetles, on the other hand, would fly or walk off the plant following an encounter with red imported fire ant. Pecan aphid populations were reduced by removing ants from the pecan tree crown with an application of chlorpyrifos in a band around the tree trunk.