

Summary

The effectiveness and manner of application of several herbicides in the control of bracken (*Pteridium aquilinum*), an invading weed common in Panama's milk-producing areas, were evaluated. The trial was conducted in an Inceptisol in Volcán, Chiriquí, Panama. The herbicides and the doses applied, in parentheses, were: amine 2,4-D alone (3%, 6%, 9%) and in a mixture with picloram (1.5%, 3.0%, 4.5%) applied by spraying foliage, and glyphosate also applied by spraying (1%, 2%, 3%) and with a hand-held roller (5%, 10%, 15%).

After 30 days of application, the best control was obtained with amine 2,4-D at 9% and with its mixture with picloram at 4.5%. However, after

these treatments, greatest regrowth of bracken was found after 90 days. On the contrary, glyphosate initially showed low control, but after 90 days its effectiveness increased, especially at 3% applied by spraying foliage and 15% applied with a hand-held roller. The herbicides and forms of application were effective in the control of bracken only up to 150 days; therefore, in order to effectively control this weed in pastures, it is necessary to combine herbicide applications with grazing management and soil fertility.