

EXTERIOR PERIMETER, LOCALIZED INTERIOR TREATMENTS OF HOMES FOR SUBTERRANEAN TERMITE CONTROL IN NEW MEXICO, USA

¹JACK D. ROOT, ¹HELEN NORTH-ROOT, AND ²ROBERT DAVIS

¹North & Root Consulting, Aztec, NM and ²BASF Specialty Products, Pflugerville, TX
e-mail: nmtermite@earthlink.net

Abstract The termite activity of fipronil (Termidor[®]) termiticide/insecticide was first discovered in 1997. Field research trials produced data showing that fipronil had effects on termites distant from the treated area. Following this discovery, several homes were treated as exterior perimeter only treatments, or as exterior perimeter plus localized interior treatments. Based on these studies and the earlier field trials, the activity of fipronil on termites remote from the treatment site was confirmed. However, data on the efficacy of fipronil on structures actively infested with *Reticulitermes tibialis* in New Mexico were limited.

In 2005, six single family homes infested with *R. tibialis* were identified in New Mexico, USA. Termite treatments utilizing Exterior Perimeter/Localized Interior (EP/LI) Directions for Use listed on the fipronil SC (Suspension Concentrate) and WG (Wettable Granule) or WDG (Wettable Dispersable Granule) labels were performed. All homes had active infestations with at least one active interior site that required at least one localized interior treatment. The protocol required collection of live termites infesting the home. Applications were performed by licensed pest management professionals under the supervision of an industry consultant. Pre- and post-treatment site inspections were conducted. All structures were monitored at two-month intervals through two years post treatment. Data were collected on different home construction types, sites and environmental conditions. All homes that received the EP/LI treatments exhibited 100% termite control for the entire two-year period. These data provide direct support for the continued use of fipronil EP/LI treatments by the pest management industry for use on *R. tibialis* and indirect support for use against other subterranean termites.