

Trelona Technical Note #1

Trelona® ATBS – Ongoing Testing in the toughest of conditions

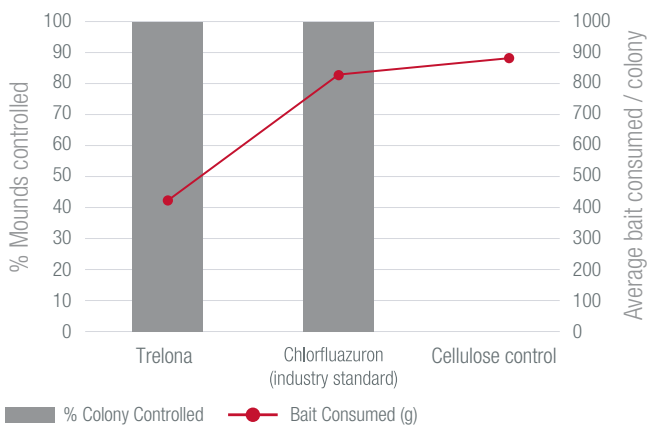
Trelona Termite Bait and Advance Termite Bait System (ATBS) are the latest innovations from BASF to support professional pest managers in Australia. These groundbreaking technologies support our existing termite management portfolio, providing pest management professionals with the most complete and robust solutions for any situation.

Trelona Termite Bait is powered by a unique active ingredient Novaluron formulated within BASF's patented Puri-cell bait technology. Novaluron is a next generation Chitin Synthesis Inhibitor (CSI), effective on all key subterranean termite species. The Trelona Bait has a unique Puri-cell matrix has been shown to be highly palatable to all species of termites, while being robust enough to last in Australian conditions.

Development of Trelona Termite Bait in Australia

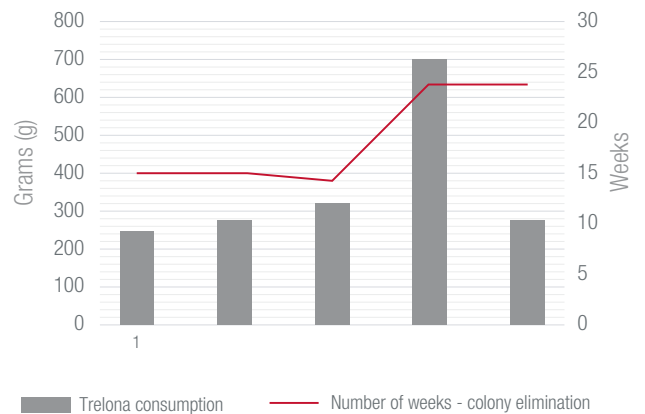
Development and testing of this unique innovation has been ongoing in Australia and began over eight years ago. Initial field trials commenced in 2012 to test the active ingredient on key Australian species. Phase two of the field trials was extended to assess bait elimination and palatability utilising sites throughout northern and eastern Australia (Refer to Figure 1).

Mound trials with *Coptotermes acinaciformis* demonstrated less bait required for colony elimination



Source: BASF Australia 2017

Mini house trials with *Mastotermes darwiniensis* - 100% colony elimination



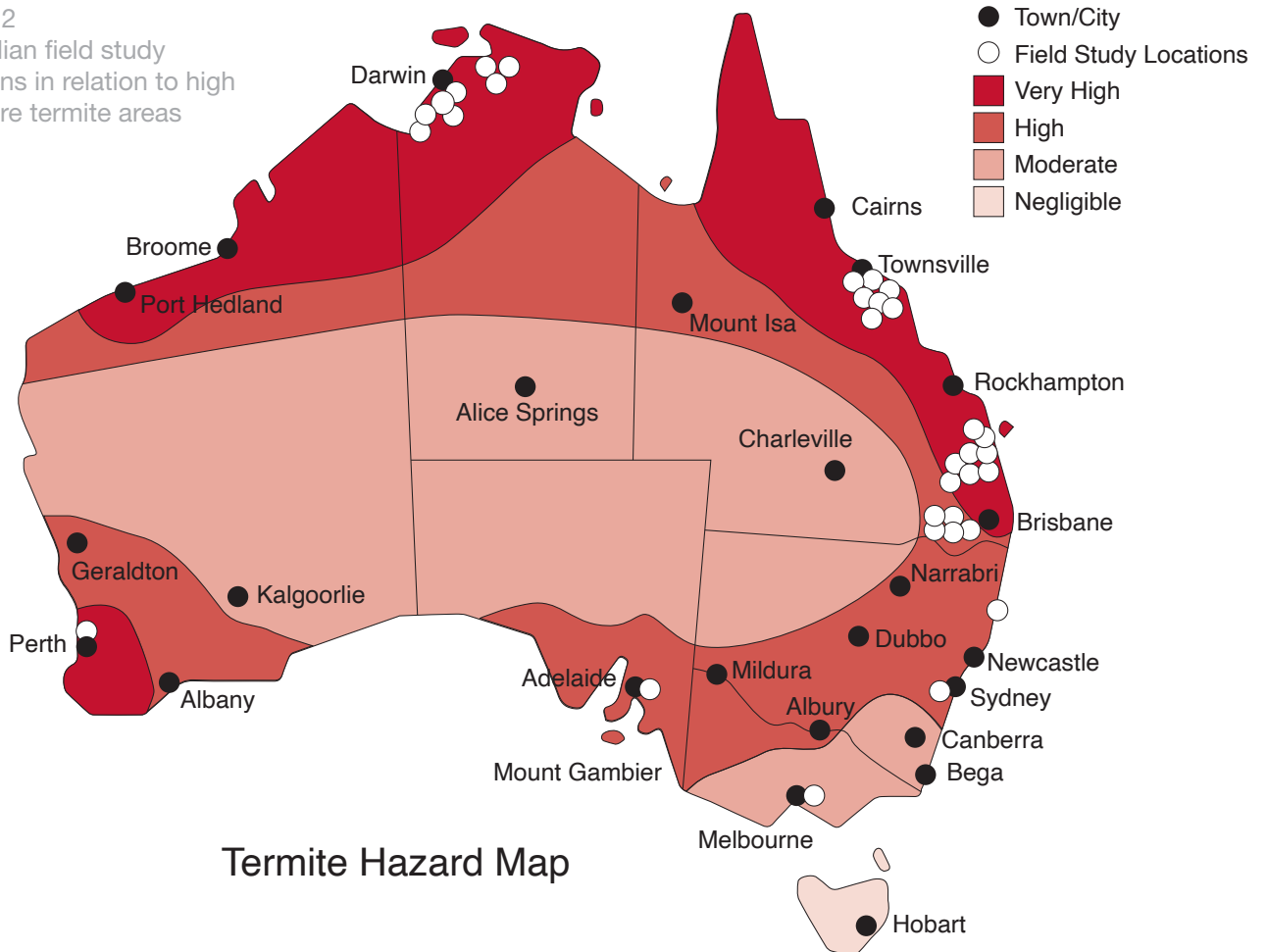
Source: ATP Research 2017

Figure 1



In 2015 commercial house trials were established with the installation of Trelona ATBS in various locations around Australia. These trials presented an opportunity to install and test the Trelona ATBS in conjunction with a combined treatment of Termidor Residual or Termidor HE soil treatment to give maximum structure protection.

Figure 2
Australian field study locations in relation to high pressure termite areas



Field Stability Assessments

Laboratory stability studies have demonstrated that the active ingredient and Puri-cell bait matrix in Trelona cartridges remain stable for up to 10 years when stored in appropriate conditions. Ongoing, large scale field plots have been established and designed to determine Trelona bait stability, palatability and efficacy – over multiple years.

These studies have been established in multiple locations with Trelona termite bait installed in field conditions within ATBS stations. At regular time intervals, 6-12 monthly, bait cartridges are collected from field sites and used in field feeding trials to investigate palatability and performance. Baits are also analytically examined for active ingredient concentration.

Most recent field collections demonstrate that Trelona termite baits remain efficacious and palatable for a period of up to 3 years post installation. These studies are ongoing, and recommendations will be updated as data becomes available.

Note: There are no label requirements to the replace uneaten cartridges, it is recommended that cartridges be assessed for mould or excess water damage and replaced as required. Although station inspection intervals will be between 3-6 months, we would recommend a thorough assessment of the bait cartridges occurs on an annual basis.



Figure 3
36 aged bait feeding trials – North Queensland
(Photo: Scott Klienschmidt ATP Research)

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