

AN UPDATE ON THE BIOLOGICAL CONTROL OF BELLYACHE BUSH

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Jatropha gossypifolia, commonly known as bellyache bush is a serious weed of rangelands and riparian zones in northern Australia. Bellyache bush has been the target of biological control since 1996 with the release of one agent, which failed to establish. Following field surveys in Peru, Bolivia and Paraguay, a leaf miner was prioritised for thorough host specificity testing. The bellyache bush leaf miner, *Stomphastis thraustica* was approved for release in Australia in September 2022. Field releases commenced in October 2022. By the end of 2024, 77 releases of the leaf miner had been made at 31 sites across Queensland and three sites in the Northern Territory. During the host specificity testing of *S. thraustica*, an existing leaf miner on bellyache bush in Australia was also determined to be a *Stomphastis* species, though not *S. thraustica*. The *Stomphastis* species already present in Australia is widespread, found at nearly all sites where *S. thraustica* has been released in Queensland and the Northern Territory. It is also known to occur in Western Australia. *Stomphastis* species cannot be easily differentiated morphologically. To confirm the establishment of *S. thraustica* and whether interbreeding occurs between the two species in the field we are currently collecting larval samples from release sites for DNA analysis. We are also looking at the level of leaf miner attack (potentially from both *Stomphastis* species) across release sites in Queensland. The leaf miner is the first of several agents currently under investigation.