



Figure 2. Predictions of (a) number of nodules per pot and (b) fresh weight of five nodules. Both measures produced significant interactions. The bradyrhizobia indicated by “*” are significantly different to CB1015 under the same soil conditions. Lsd values are 50.0 nodules per pot and 0.036 g respectively.

Conclusion

This study suggests that gains could be made in mungbean performance through use of better-adapted bradyrhizobia. A diverse range of mungbean-compatible bradyrhizobia strains were found in a small sample of soils from north Queensland. Some of those were found to be superior to the commercial inoculum CB1015 in promoting mungbean growth under neutral soil conditions. Under acid conditions, bradyrhizobia strains differed in their ability to promote mungbean growth, but no wild bradyrhizobia strain tested here was significantly superior to CB1015. Results from this small survey suggest that further untapped resources of wild bradyrhizobia may be found that could be exploited to improve performance of legume crops in northern Australia.

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