B-16 The growth and nodulation of *Centrosema* species to added lime

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A pot culture study was done to test the effects of added lime as CaO at rates equivalent to 0,125 and 250 kg/ha using *Centrosema macrocarpum, C.brazilianum* and *C.acutifolium*. The soil used was from a location where a *Centrosema* species was growing, which showed a pH of 4.7. Added lime enhanced the dry matter accumulation (shoot and root), nodulation and shoot nitrogen content of all species studied. Incorporation of lime at a rate of 125 kg/ha raised the pH of the soil to 5.7. The latter treatment was better than liming at a rate of 250 kg/ha giving a pH of 6.7. *C.macrocarpum* had significantly higher shoot and root dry matter while *C.brazilianum* showed the highest nodulation (number, size, mass and effectiveness) and in *C.acutifolium* though the latter parameters were low, it contained the highest shoot nitrogen concentration. It is concluded that a lime application of 125 kg/ha giving a pH 5.7 is favourable for the successful growth and nodulation of *Centrosema* species under conditions at Mapalana. The varying responses of the species may be due to their inherent characteristics.