

Summary

Twenty-two taxa and five interspecific hybrids of *Leucaena*, grown together on a site in Honduras, were evaluated in terms of their potential value as tropical fodder crops. Content of crude protein, organic matter, acid detergent fiber, neutral detergent fiber, total tannins, and condensed tannins (proanthocyanidin), as well as in vitro digestibility, were estimated in dried leaf samples, and the accessions ranked according to each of these criteria. The relative palatability of 13 of the taxa and two of the hybrids was also assessed in a 'cafeteria' trial using fresh leaf material fed to sheep over an 18 day period. Protein, digestibility and palatability estimates, together with previously published yield data, were used to construct three indices of fodder potential, to allow direct comparisons between taxa. The most promising taxa according to these criteria include *L. shannonii* subsp. *shannonii*, *L. collinsii* subsp. *zacapaca*, and *L. multicapitula*, all of which achieved higher scores than the much better-known *L. leucocephala* subsp. *glabrata* in the index derived from CP and digestibility. When yield and palatability were included in the indices, the very high palatability of *L. leucocephala* gave it the highest score overall. The most unpromising taxa include *L. pulverulenta*, *L. trichandra*, *L. esculenta* (subsp. *esculenta* and subsp. *matudae*), and *L. greggii*.