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Weeds cause up to 30% losses in crops worldwide. Mechanisms commonly used to manage these weeds have many disadvantages, such as large amount of labor, or the risks of environmental contamination. Also, it is known that invasive species are a threat to native species and biodiversity, however, extracts from invasive allelopathic species, such as Fabaceae, could be an alternative to control weeds. In this research, morphometrical effect of allelochemicals in aqueous extracts of *Ulex europaeus* (U) and *Teline monspessulana* (T) was studied as potential bioherbicides to manage the weed *Portulaca oleracea* present in south-central Chile.

Materials and methods

- Plant material was collected on the hill of the University of Concepción, Chile, and weed seeds were collected in Santa Clara, Ñuble, Chile.
- Seeds were previously germinated in soil irrigated with water.
- Aqueous extracts were made by shaking the aerial parts of the plants for 24 h submerged in distilled water, then filtered.
- Seedlings were irrigated with extracts 3 times per week and morphometric variables evaluated after 90 days.

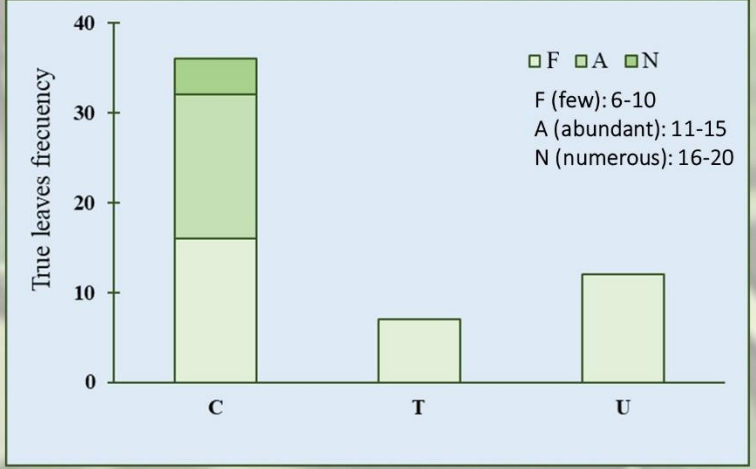
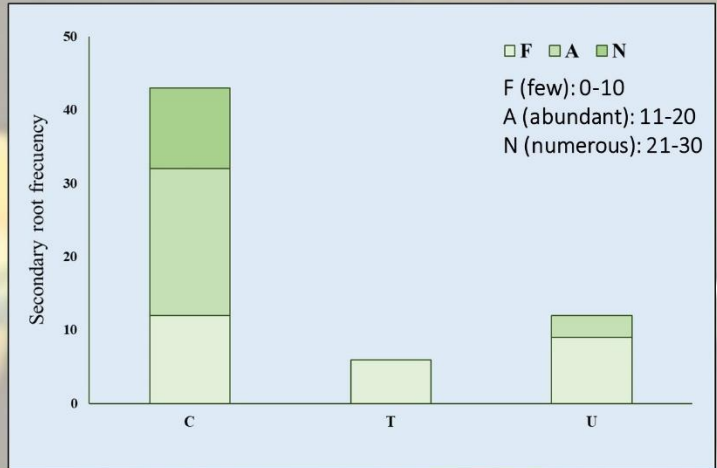
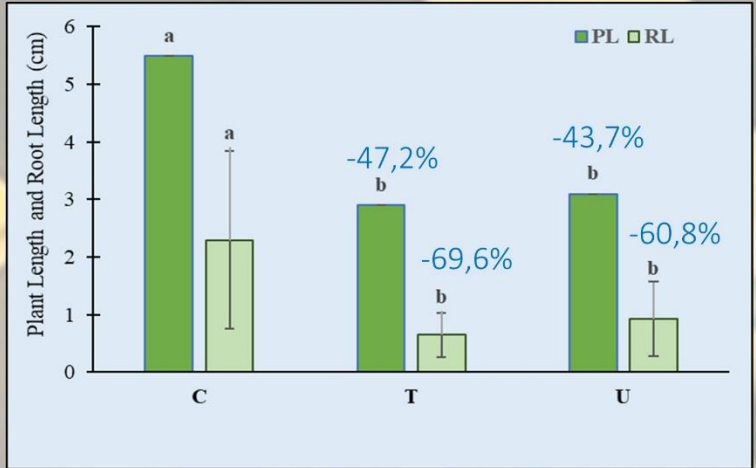
U. europaeus



T. monspessulana



P. oleracea



Treatment	Dry mass
C	0,02 g (± 0,01) ^a
U	0,009 g (± 0,01) ^b -55%
T	0,002 g (± 0,002) ^b -90%

Discussion and Conclusions

1. Aqueous extract of *T. monspessulana* reduced the initial growth and root length of *P. oleracea* by 47.2 and 69.6%, respectively.
2. Aqueous extract of *U. europaeus* reduced the initial growth and root length of *P. oleracea* by 43.7 and 60.8%, respectively.
3. Aqueous extracts of *T. monspessulana* and *U. europaeus* reduced leaf and secondary root frequency of *P. oleracea*.
4. Extracts significantly decreased dry mass compared to the control.
5. Control treatment reached 10% mortality, while plants irrigated with extracts of *T. monspessulana* and *U. europaeus* reached 86 and 56% respectively.
6. The weed showed high vulnerability and ease of management. Same behavior observed in similar studies with it.