

Broad-leaf weeds in rice

Purslane (*Portulaca oleracea*)

Description

- This is an annual succulent weed that grow rapidly and is able to produce numerous seed within 6-8 weeks.
- The weed produces numerous seeds that germinates rapidly.
- Freshly cut stems e.g. during cultivation have the ability to easily produce roots and grow into new plants. This makes it difficult to control the weed by cultivation.
- The stem is branched and grows along the ground attaining a height of 15cm and 30cm long.
- The leaves are spoon shaped, shiny, dark-green and develops a red margin as they mature. When crushed, it produces a milky slippery mucilage.
- The seeds are small, egg shaped, flat and black to brown.
- The flowers are small, yellow and frequently form at the end of the secondary branches.
- The weed produces a taproot.



Fig 1 : Creeping stems of Purslane

Source: M.D. Thuraniira

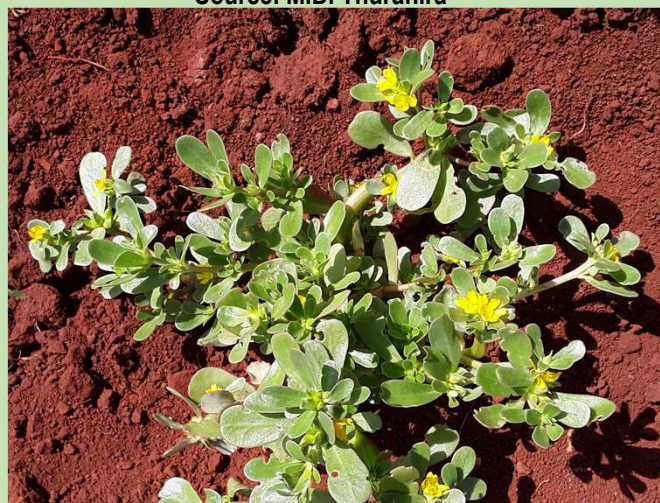


Fig 2 : Leaves and flowers of Purslane

Source: M.D. Thuraniira

Crop losses and associated damage

- The dense mat of the weed competes with rice for nutrients, water and space and prevents emergence of seedlings.
- The competition also leads to poor growth and reduced yields.
- Yield losses of 30% have been reported.

Geographical distribution

- The weed is capable of growing in poor and dry soils and therefore is widely distributed in upland rice ecologies in East Africa.

Contact experts: Mutiga, S., (Mutiga@uark.edu), Mwongera, D., Kirigua, V., Otipa, M., Kimani, J., Mugambi, C., Ngari, B., Ochieng, V., Wasike, V., Wandera, F., Wasilwa, L., Nyamongo, D., Too, A., Nyongesa, O. (IRRI); Zhou, B. (IRRI); Mitchell, T. (OSU); Wang, G. L. (OSU); Were, V. (TSL); Ouedraogo, I. (INERA); Rotich, F. (UoEm); Correll, J. C. (UARK) and Talbot, N. J. (TSL). *E-Guide for Rice Production in East Africa (2019)*