

Collection and identification of different Purslane (*Portulaca oleracea* L.) accessions available in Western Peninsular Malaysia

ABSTRACT

Purslane (*Portulaca oleracea* L.) is widely distributed around the globe and is popular as a beneficial herb in many areas of Europe, Asia, and the Mediterranean region. It is already very well known for its nutritional as well as medicinal values for both human and animal feeds. It is a rich source of potassium, magnesium, calcium and possesses the potential to be used as vegetable source of omega-3 and 6 fatty acids. It is very good source of alpha linolenic acid and gamma-linolenic acid of any green leafy vegetable. It also contains high amount of α -tocopherol and ascorbic acid. The antioxidant content and nutritional value of purslane are important for human consumption. It revealed tremendous nutritional potential and has indicated the potential use of this herb for the future. Purslane is a very fast-growing plant and can reproduce vegetatively from stem cuttings by forming adventitious roots from the cut end of the stem. Recently many plant species are threatened with extinction through human activity and the force of globalization. Plant collections are a valuable tool both in research and as a valid means of providing students at many educational levels with knowledge of and appreciation for the wonder, diversity, and beauty of plant life. Collection of diverse accessions, identification, preservation and proper management of such beneficial plants is very important for their diversity analysis which is essential for present and future human well-being. The identification of representative and manageable subset of accessions would facilitate access to the diversity available in large collections. Giving importance on the above matters a total of 45 different purslane samples were collected from different locations of Western Peninsular Malaysia, properly identified and subjected for future detailed analysis of morpho-physiological and nutritional variations among the collections.