

Wild Kodo millet, *Paspalum* spp.: a weedy herb in the paddy fields of Northern Province, Sri Lanka

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Grasses possess medicinal value especially in their grains, rhizome or stolon. Commonly Kodo millet, *Paspalum scrobiculatum* has been used for curing diabetes by the traditional medical practitioners. The grains are reported to have potential in the development of drug for diabetes due to their antidiabetic activity as well as rheumatic arthritis. This wild Kodo millet was first reported in 2012 as a weed in the fields of Government Seed Farm, Paranthan, Kilinochchi. Upon receiving complaints of farmers from other paddy growing areas of Northern Province, this research was carried out to investigate the existence of this weedy herb in all the districts of Northern Province. A survey carried out across Northern Province of Sri Lanka using a structured questionnaire revealed that the wild Kodo millet was found spreading as a problematic weed in the paddy fields of all five districts of Northern Province during Maha 2013/14. This wild Kodo millet exhibited morphological features of *P. scrobiculatum* (Family: Poaceae) as per the revised taxonomic key. The presence of the weed was only understood by the farmers in the paddy field by differentiating its inflorescence after emergence. Lack of awareness in identifying the weed due to its resemblance in morphology with the paddy varieties grown in these areas resulted improper hand weeding to remove it at its early stage. The survey revealed that wild Kodo millet was found in Jaffna (20.4%), Kilinochchi (23.3%), Mannar (19.3%), Mullaitivu (22.3%), and Vavuniya (16.8%) paddy growing fields. Grains and stolon were found as the propagative materials of this weed and serve as the primary source for spreading in the paddy fields. The seed paddy obtained from the farmers of Kilinochchi district for mechanical processing at Seed Paddy Production Farm at Paranthan revealed that 60% of the farmers' samples had different weed seeds of which 40% of the seed paddy had wild Kodo millet grains. This non-native wild Kodo Millet become the problematic weed of paddy fields in these areas and proper early identification and best weed management practices could help to lessen its spread and to reduce the yield loss. Additionally digging of the rhizome and stolon from the fields during off-season could help to reduce its competition with paddy whereas the harvested underground plant parts would support the indigenous medicine for their medicinal preparations.

Keywords: Paspalum, wild Kodo millet, Northern Province, weed, medicinal value