

SAU PERILLA-1: A PROSPECTIVE OIL SEED CROP FOR EDIBLE OIL PRODUCTION DURING KHARIF-2 SEASON IN BANGLADESH

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Abstract

SAU Perilla-1 (*Perilla frutescens* (L.) Britt.) is a new oil seed crop variety developed by Sher-e-Bangla Agricultural University through introduction and acclimatization in Bangladesh. This variety is well suited to cultivate during the Kharif-2 season (during Monsoon) in Bangladesh to produce edible oil. SAU Perilla-1 has a high oil content, ranging from 38% to 40%. The oil is a nutritious and healthy choice as it has zero Erucic acid but contains high percentage of unsaturated fatty acids (>90%), with Omega-3 fatty acids making up >50% of these unsaturated fatty acids. The crop is also relatively easy to grow, with a short growing season of 70-75 days to harvest from main field. Field trials have shown that SAU Perilla-1 has yield potential of 1.3 to 1.5 tha^{-1} . It was also revealed that farmers can benefit from using the same land with a new cropping pattern comprised of SAU Perilla-1 with other crop varieties such as BARI Sarisha-14 - BRRI dhan-28 - BRRI dhan-48 - SAU Perilla-1 and this practice could lead to improve cropping intensity and income of the farmers as well. Moreover, the crop could easily be cultivated in fruit gardens like papaya, mango, litchi etc. as an intercrop and on fallow land especially slopes of roads and high ways as well. According to the Bangladesh Edible Oil Producers Association (BEOPA), Bangladesh imported around 3.2 million metric tons of edible oil in the fiscal year 2020-21. The country's annual demand for edible oil is expected to rise to 3.8 million metric tons by 2030. This heavy reliance on imported edible oil puts a significant strain on the country's foreign exchange reserves. In this case SAU Perilla-1 has the potential to be a sustainable alternative to supplement the imported edible oils and could contribute to reduce the dependency on imported edible oil in Bangladesh. By 2022 the crop is cultivated in almost 100.00 acres of land over 20 districts in Bangladesh. Thus, the crop is gradually approaching as an attractive option for farmers providing an additional source of income especially during Kharif - 2 season when no other oil crops are not cultivated in Bangladesh. In conclusion, with its high oil content and excellent oil quality, SAU Perilla - 1 would have been appeared as an additional choice of potential and profitable crop for reliable source of domestic edible oil towards reduction of edible oil import volume in Bangladesh.

Keywords: oil seed crop, kharif - 2 season, SAU Perilla-1, Bangladesh