

The trend of fertilizer usage by paddy farmers in Ampara district, Sri Lanka

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Paddy farmers have abandoned the systematic method of fertilizer application and inappropriate usage of fertilizers has challenged human and environmental health. Hence, it is vital to comprehend the trend of fertilizer usage by farmers to prevent excessive application. Therefore, a survey was conducted from April to August 2021 among 296 commercial male paddy farmers in the Ampara district to study their fertilizer usage trend. There were four distinct methods that farmers used to fertilize their farms. During seed sowing 58% of farmers applied TSP, followed by NPK mixture, cow and goat dung, while 32% of the farmers did not apply any fertilizer and instead of it they increased tillage, burned their fields, and created water ponds to retain moisture in their fields. Very few farmers took no action at this point. Most of the farmers (67%) applied only urea while the remaining applied different varieties of fertilizers with urea 14 to 21 days after sowing. Farmers used varieties of fertilizer mixtures depending on the state of the rice plant. Additionally, farmers who did not use TSP during the sowing period did so now. After 28 to 30 days of sowing, 73% of the farmers added urea, while others used a mixture of urea with discovery/ microvee/TSP/Ammonium sulfate. During 35 to 40 days following sowing, 92% of the farmers used a mixture of urea with MOP, whereas the remaining used different varieties of mixtures with urea. In addition to these, wealthy farmers applied additional urea to raise production, while some used TSP sparingly throughout the aforementioned times. Based on this study, most of the farmers applied a higher amount of urea and TSP than the recommended level. Hence, it is suggested to educate the farmers about the importance of fertilizer usage efficiency compared to fertilizer usage intensity.

Keywords: Ampara district, fertilizer, paddy farmers, seed sowing