Effect of foliar fertilization of zinc levels and some weed control treatments on wheat yield and its associated weeds

Ibrahim El-Metwally¹, M S Abd El-Salam¹ and Osama A M Ali²
¹National Research Centre, Egypt
²Minufiya University, Egypt

Studies were carried out to investigate the efficiency of different post-emergence herbicides (Pyroxasulam, Isoproturon+diflufinican, Isoproturon, Mesosulfuron-methyl, hand weeding and unweeded check) and Zinc levels (0, 1, 2 and 3 gm/L) in wheat crop at the experimental farm of National Research Center, Noubaria region, Egypt during the two successive seasons (2012/13 and 2013/14). Isoproturon+diflufinican achieved the highest weed depression expressed in the lowest number and dry matter of broad-leaved, narrow-leaved and total weeds and reduction percentage in dry matter of total weeds were 93.6% and 93.4% in the first and second season respectively compared with unweeded. Increasing Zinc levels from 1 to 2 and 3 gm/L significantly increased number and dry weight of wheat weeds after 80 days from sowing (DFS). Isoproturon+diflufinican was superior treatment for increasing plant height, spike length, grains number/spike, grains weight/spike, spikes number/m², straw and grain yields as well as chemical composition of wheat flag leaves and grains. Application of isoproturon+diflufinican herbicide provided 55.1% and 57.8% more grain yield than weedy check in the 1st and 2nd seasons respectively. Application of Zinc at the rate of 3 gm/L recorded the highest value of growth, yield and yield attributes as well as chemical composition of wheat flag leaves and grains. The interaction between zinc levels and weed management treatments had significant effect on total number and dry weight of weeds, spikes number/m² and grain yield. Isoproturon+diflufinican treatment was used. Application of 3 gm/L zinc gave the maximum values of spikes number/m² and grain yield when isoproturon+diflufinican treatment was applied. It could be concluded that using 3 gm/L Zinc resulted in increment of growth and productivity of wheat crop when isoproturon+diflufinican treatment was used.

Malaysia dairy farmers’ understanding level on sustainability practices

Nalini Armugam, Bonaventure Boniface and Zainab Mohd Karim
University Sultan Zainal Abidin, Malaysia

Agriculture sustainability is positively believed to deliver huge benefit to the farmers and society. However, in Malaysia, the sustainability concepts and practices seem not fully aware among the dairy farmers which result in low self-sufficiency level in milk production. The 6% of self-sufficiency in milk production leads to urgency of importing milk from other countries namely Australia, New Zealand and Holland to meet the local demands. This study intended to describe the dairy farmers understanding on dairy farm sustainability practices. A total of 167 dairy farmers were interviewed using structured questionnaires from six different states in Malaysia. The dairy farming practices that adopted by interviewed farmers were measured using the Likert-like scale. The mean score of the sustainability practices were determined and gathered data was analysed using SPSS. The findings indicated that the dairy farmers had a higher understanding about the farm sustainability aspect which gives the highest mean score of 4.52. The second highest mean score is the ecological aspect which is about 4.20. The mean score for economic aspect shows about 4.03. The social aspect of sustainability revealed the lowest mean score which was about 4.01. The results indicated that the farmers favour sustainable practice is farm sustainability system. The findings revealed that most of the dairy farmers were understand the importance of sustainability practices in increasing the self-sufficiency level. The involvement of government in handling land issue and introduction of new innovative concept in dairy farming positively believed to reduce the import bill of milk consumption.