WATER USE AND WASTEWATER TREATMENT ON DAIRY CATTLE FARMS

ANNAMÁRIA BÁNFI[1], EDIT MIKÓ[1], CECILIA HODÚR[2]

[1] University of Szeged
[1] Faculty of Agriculture, Hódmezővásárhely, Hungary
[2] Faculty of Engineering, Szeged, Hungary
banfiannamaria@gmail.com

Environment protection, and potable water protection is a great challenge nowadays. Out of the total water consumption in the world, domestic water consumption represents 10%, industrial purposes 20%, while 70% is for agricultural use. Irrigated plant production is responsible for the largest agricultural water consumption. Livestock production requires about 30 % of agricultural water use including irrigation water for feed crops, drinking water for livestock and water for servicing (cleaning, washing, cooling etc.). Eighty percent of consumptive water (CW) use is green water applied on agricultural land. In livestock production this value is 90%, however the amount of CW depends on rainfed grazing lands. Approximately 8% of the consumptive water use of the livestock is blue water for drinking water, servicing and feed mixing. Considering livestock production, the dairy cattle sector is one major water consumer within agriculture. On dairy cattle farms water is used as drinking water for the animals, plate cooler water and for plant washing as well (bulk tanks, parlour plant). In addition to water consumption, wastewater treatment is equally important since in case it enters surface waters, it can contaminate aquatic organisms, the soil, and through these, the drinking water quality as well. This paper wishes to present the reasons for using different amounts of water in cattle production, the importance of collecting yard and parlour washing down and the possibilities of water treatment, with special attention to waste water reuse as a real double saving.