

Environment (Year and Season of Birth) Effects on First-Lactation Milk Yield of Dairy Cows

Publons ID	36330077
Wos ID	WOS:000519990700010
Doi	10.1088/1755-1315/372/1/012010
Title	Environment (Year and Season of Birth) Effects on First-Lactation Milk Yield of Dairy Cows
First Author	Susanto, A.; Hakim, L.; Suyadi; Nurgiartiningsih, V. M. A.;
Last Author	
Authors	Susanto, A; Hakim, L; Suyadi; Nurgiartiningsih, VMA;
Publish Date	2019
Journal Name	1ST ANIMAL SCIENCE AND FOOD TECHNOLOGY CONFERENCE (ANSTC) 2019
Citation	
Abstract	<p>Nutritional status (protein and energy) during early life has important effect on milk yield of dairy cows. Feed quantity and quality is often influenced by season representing the fluctuation of water supply which is essential for plants including forage. The aim of the present study was to analyse the effect of year and season of birth on first-lactation milk yield of Holstein Friesian cows. The data included 1005 records of first-lactation daily recorded milk yield available in National Breeding Centre for Dairy Cows and Forages of Baturraden (the so-called BBPTUHPT Baturraden) database. The milk yield was recorded within the years of 2004 to 2014. Milk yield data were adjusted to 305 standard days of milking using multiplicative-local correction factor. Animals' date of birth was grouped divided into years and months of birth. Months of birth were assigned into: (1) traditional-two season categorization (wet and dry), (2) extended-categorization of three seasons (wet, wet-dry and dry), (3) extended-categorization of four seasons (wet, wet-dry, dry and dry-wet). The effect of date of birth factor on first-lactation milk yield was tested using likelihood ratio test of full and reduced model. The result showed that both years and months of birth have significant effect on first-lactation milk yield, regardless of the season categorization. It is therefore concluded that season plays important role to consider in dairy cattle management and has to be included in genetic analysis to remove non-genetic effect which regards to first-lactation milk yield.</p>
Publish Type	Book in series
Publish Year	2019
Page Begin	(not set)
Page End	(not set)
Issn	1755-1307
Eissn	
Url	https://www.webofscience.com/wos/woscc/full-record/WOS:000519990700010
Author	Dr Ir AGUS SUSANTO, M.Agr.Sc