
ICELANDIC AGRICULTURAL SCIENCES • 28/2015

CONTENTS

EDITORIAL	2
EYTHÓR EINARSSON, EMMA EYTHÓRSDÓTTIR, CHRIS R. SMITH AND JÓN VIDAR JÓNmundSSON Genetic parameters for lamb carcass traits assessed by video image analysis, EUROP classification and <i>in vivo</i> measurements.	3
JAN ERIC JESSEN, THORODDUR SVEINSSON, SEAN MICHAEL SCULLY AND JOHANN ORLYGSSON Ethanol production by a <i>Paenibacillus</i> species isolated from an Icelandic hot spring – Production yields from complex biomass.....	15
Short communication	
MARJA MALJANEN, MAARIT LIHMATAINEN, BJARNI D. SIGURDSSON Effect of volcanic ash on GHG production rates and soil properties in a drained peat soil compared to wood ash	25
REYNIR SMARI ATLASON, KARL MARTIN KJAERHEIM, BRYNHILDUR DAVIDSDOTTIR, KRISTIN VALA RAGNARSDOTTIR A Comparative Analysis of the Energy Return on Investment of Organic and Conventional Icelandic Dairy Farms	29
KRASSIMIRA ILIEVA-MAKULEC, BRYNHILDUR BJARNADOTTIR, BJARNI D. SIGURDSSON Soil nematode communities on Surtsey, 50 years after the formation of the volcanic island	43
ÚLFUR ÓSKARSSON AND WOLFGANG HEYSER Inoculation with arbuscular mycorrhizal fungi, fertilization and seed rates influence growth and development of lyme grass seedlings in two desert areas in Iceland.....	59

Editorial

This year Icelandic Agricultural Sciences joined Cross Ref and all articles published in 2015 and onwards will have a DOI (digital object identifier) number which is unique for each published article; the number leads only to the corresponding article. By using the prefix <http://dx.doi.org> with the DOI number an active link to the articles is provided. This is an important step in making the journal and published articles more visible and to increase accessibility. This also means that the electronic version of our published work will be more securely stored for years to come and we trust that the DOI numbering system will remain as this has become the standard for scientific publications. IAS is an open source journal and we have managed to publish articles up to a certain length free of charge.

Following these changes and to reduce costs and also taking into account that most researchers use the online version of scientific articles rather than the printed copies, we have stopped printing the journal. This means that IAS is now an online journal only and we are thereby following a trend that has been established in recent years.

In this issue we have 5 full length original research articles and one short communication. They deal with a wide range of subjects as in previous years: On the genetic parameters of lamb carcass traits; on ethanol production by a *Paenibacillus* species from an Icelandic hot spring; on the effects of volcanic ash on greenhouse gas production rate and soil properties in drained peat; a comparative analysis of the energy return of investment of organic and conventional Icelandic dairy farms; on soil nematodes in Surtsey 50 years after the island formed; and on how AMF inoculation, fertilization and seed rates influence growth and development of lyme grass seedlings in two desert areas in Iceland.

Our scope covers environmental sciences in the circumpolar region, which is now facing substantial changes due to climate change and increased public and political attention. We feel that providing this platform for research articles dealing with the cold regions is increasingly more important, strengthening our view to continue to be strict in holding to the scope of the journal. This year we received over 80 manuscripts dealing with research in much warmer areas, mainly from the Middle East countries but also from Pakistan, India and other warmer countries. Many of these manuscripts are of high quality, but as they are not within the scope of IAS they had to be rejected.

Thorsteinn Gudmundsson