Domestic Grasses as Cattle Main Feed on Coastal Area at Desa Ujung Genteng, Kecamatan Ciracap, Kabupaten Sukabumi

M.A. Setiana Faculty of Animal Science, Bogor Agricultural University email: massetiana@yahoo.com

ABSTRACT

In general, forage for cattle in Indonesia comes from the domestic availability of grass, only efforts to improve the culture is still very limited. And also research related to domestic grass. Therefore, basic research is needed to feed the domestic grasses to determine its potential as a plant cultivation. The purpose of this study is to identify potential types of grass as a source of forages for cattle. Research conducted by survey method, direct observation, sampling plants, shooting, ex-situ preservation. creation and identification of herbarium. In general, there are cattle in the desa Ujung Genteng is Peranakan Ongole (PO). Cattle released for 24 hours in open areas along the coast. In addition to cattle, there are also sheep and goats. Performance of livestock in general either do not seem thinness indicated. Depends entirely forage available, particularly domestic grasses. There are 16 types of grass found along the coast, divided into 3 belt: Belt-1 (directly adjacent to the sea) consists of: Dactyloctenium aegyptium (L) wild, Cynodon dactylon (L) Pers., Digitaria sanguinalis (L.) Srop, Ischaemum muticum (L.) dan Imperata cylindrica (L.) P. Beauv.Gaertn,, Belt-2 (sand-dominated soil) consists of: Chrysopogon aciculatus (Retz.) Trin., Brachiaria subquadripara (Trin.) A. Hitchc., Brachiaria distachya (L.) Stapf., Chloris barbata Swartz., Themeda triandra Forssk., Paspalum cartilagineum Presl., Digitaria nuda Schumacher, Paspalidium flavidum A. Camus, Eragrostis amabilis (L.) Wight & Arnott ex Nees and Eleusine indica (L.) and Belt-3 (predominantly clay soil) consists of: Eulalia leschenaultiana (Decne.) Ohwi. Based of observation on field and ex-situ there are 5 types of grass that is cultivated potential for Digitaria sanguinalis (L.) Srop, Ischaemum muticum (L.), Brachiaria subquadripara (Trin.) A. Hitchc., Brachiaria distachya (L.) Stapf.dan Paspalum cartilagineum Presl.

Key words: domestic grass, sandy beaches, beef cattle

INTRODUCTION

In general, beef cattle feed in Indonesia comes from the domestic availability of grasses, only an effort to improve the culture is still very limited. Likewise, research related to domestic grass. Utilization of the beach as cattle grazing fields practically no attention. South Coast of West Java has a huge potential as a source of beef cattle. Coastal villagers in Kecamatan Ciracap utilize marginal land along the coast as livestock grazing areas, especially cattle. Beside that, they graze sheep and goat too.

Fodder which is the most dominant are domestic grasses, just in general have relatively low productivity. This is related to the existing pastoral systems, climatic, edaphic and genetic potential of the grass itself. Basic data to determine the potential for much needed domestic grass, among others, the potential to be cultivated grass, adaptation to the saline environment and the response to fertilization. Therefore, basic research needed to find out its potential as grass cultivation. The purpose of this study is to identify potential types of grass as a source of green feed beef cattle.

MATERIALS AND METHODS

Research conducted in Desa Ujung Genteng, Kecamatan Ciracap, Kabupaten Sukabumi in October 2009 with the survey method. Implementation research is divided into 3 Belt: Belt-1: The area directly adjacent to the sea. Plants directly affected by the tidal sea water. Media grow sand. Observation area 5-10 m from the beach grass and bushes, Belt-2: Areas not directly adjacent to the sea. Growing media is dominated by sand with coconut-dominated woody vegetation. There is also a rainfed rice

с. Т farming area. Distance of 10-300 m from the beach, and Belt-3: Areas with growing media dominated clay. Distance from the beach 300-1000 m.

All types of grass that is observed along the coast, carried out shooting and making planting materials. Next planting material is divided in two parts, the first made herbarium and second planted in Bogor. Ex-situ maintenance carried out to see the speed of growth, ease of maintenance, and response to fertilization. Herbarium grass and ex-situ cultivation then used in the process of identification through the study of literature and cross-check in Botany LIPI Research Center.

RESULTS AND DISCUSSION

Sandy beach is the extreme land for the plant because of the limited nutrients, high salinity and high porosity. Only plants that have a high adaptation that can grow or plant is very specific. Belt-1 is the most extreme conditions and only 5 species of grass found in the area of, ie: Dactyloctenium aegyptium (L) Willd, Cynodon dactvlon (L) Pers., Digitaria sanguinalis (L.) Srop, Ischaemum muticum (L.) dan Imperata cylindrica (L.) P. Beauv. Gaertn.

In general, grass can be maintained ex-situ that was located ± 250 km and a location with an altitude of 225-250 above sea level. There are only 2 types of death that is *Dactyloctenium aegyptium* (L) Willd. and *T. triandra* Forssk. Possibilities of death are 2 types of grass not because of low adaptability, but due to the planting material from pols are less good.

Based on the collections of the two types of grass can grow well, just about the response to fertilization. Naturally both types are found in Bogor, especially *T. triandra* Forssk In the Belt-2 is more diverse grass species, 10 species were recorded there that have nothing to Belt-1, and vice versa on the grass that grows only 1 Belt-1 is not present in the Belt-2 and 3 of *I. muticum* (L.). Thus there is only one specific types of grass on the sandy beach of the Ujung Genteng village of tile *I. muticum* (L.).

Based on field observations and ex-situ, there are 5 types of potential for grass grown for livestock feed is Digitaria sanguinalis (L.) Srop, Ischaemum muticum (L.) Brachiaria subquadripara (Trin.) A. Hitchc., Brachiaria distachva Stapf. and Paspalum (L.) cartilagineum Presl. Especially for sandy beaches (belt-1) developed grass I. muticum (L.).

Based on the collections of the two types of grass can grow well, just about the response to fertilization. Naturally both types are found in Bogor, especially *T. triandra* Forssk In the Belt-2 is more diverse grass species, 10 species were recorded there that have nothing to Belt-1, and vice versa on the grass that grows only 1 Belt-1 is not present in the Belt-2 and 3 of *I. muticum* (L.). Thus there is only one specific types of grass on the sandy beach of the Ujung Genteng village of tile *I. muticum* (L.).

Tabel 1. Grass Type on Sand Beach at Desa Ujung Genteng, Kecamatan Ciracap, kabupaten Sukabumi.

No.	Grass Type	Belt	Maintenance of ex-situ		
			Live/dead	Grow	Response to Fertilizer
1.	D. aegyptium	1	dead	-	
2.	C. dactylon	1	Live	poor	poor
3.	D. sanguinalis	1	Live	well	well
4.	I. muticum	1	Live	very good	very good
5.	I. cylindrica	1	Dead	•	-
6.	C. aciculatus	2	Live	poor	poor
7.	B. subquadripara	2	Live	average	well
8.	B. distachya	2	Live	average	well
9.	C. barbata	2	Live	poor	роог
10.	T. triandra	2	Dead	-	-
11.	Paspalum sp	2	Live	poor	poor
12.	D. nuda	2	Live	well	well
13.	E. unioloides	2	Live	average	Well
14.	E. unioloides	2	Live	poor	well
15.	E. indica	2	Live	well	well
16.	E. leschenaultiana	3	Live	poor	well

Feed Nutrition

Based on field observations and ex-situ, there are 5 types of potential for grass grown for livestock feed is Digitaria sanguinalis (L.) Srop, Ischaemum muticum Brachiaria (L.) subquadripara (Trin.) A. Hitchc., Brachiaria distachya (L.) Stapf. and Paspalum cartilagineum Presl. Especially for sandy beaches (belt-1) developed grass I. muticum (L.).

CONCLUSIONS

There are 5 types of grass as a potential domestic source of forage on the sandy beach of *Digitaria sanguinalis* (L.) Srop, *Ischaemum muticum* (L.) *Brachiaria subquadripara* (Trin.) A. Hitchc., *Brachiaria distachya* (L.) Stapf. and *Paspalum cartilagineum* Presl.

ACKNOWLEDGEMENTS

This research is done on private funds. A big thank you to Prof Dr Eko Baroto Waluyo, the Head of Botany LIPI Research Center for permission to identify the type of grass. Especially to Mr. Hamzah (LIPI Botany Balit technician), I want to thanks for his help in the identification.

REFERENCES

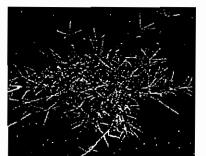
- Helena D. 2005. Field Guide to the Grasses of Singapore (excluding the bamboos). Supplement of the Gardens Bull., Vol. 59. Singapore.
- Bor, N.L. 1960. The Grasses of Burma, Ceylon, India and Pakistan (excluding Bambuseae). Pergamon Press. London
- Lazaridis, M. 1980. The Tropical Grasses of Southeast Asia. J.Cramer. Germany.
- Henty, E.E. 1969. A manual of the Grasses of New Guinea. Botany Bull No.1. Divison of Botany, Department of Forest, LAE, New Guinea.

Dactyloctenium aegyptium (L) wild



Ischaemum muticum (L.)

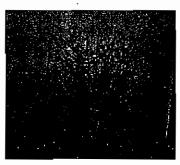
APPENDIX



Cynodon dactylon (L) Pers



Imperata cylindrica (L.) P. Beauv.Gaert



Digitaria sanguinalis (L.) Srop



Chrysopogon aciculatus (Retz.) Trin.