

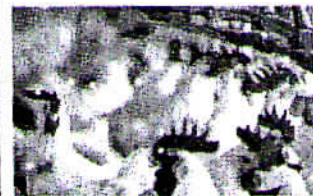
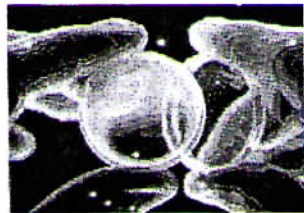
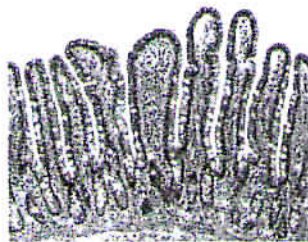
PROCEEDINGS

The First Congress of

SEAVSA

(South East Asia Veterinary School Association)

**Animal Health & Production
for Better ASEAN Quality of Life
Challenge of Veterinary Education**



The 1st
Congress of
SEAVSA



**IPB International Convention Centre
Boaor. Indonesia Julv 20 - 22. 2010**

FOREWORD

World Organization of Animal Health (OIE) held an international conference among Dean of veterinary school in Paris, on October 2009. One of the results of the conference was to recommend that every nation or region constitute an institution of veterinary certification devoted in improving the integrity and collaboration among the nations in a region. Refer to the recommendation, veterinary school in South East Asia found an association called "South East Asia Veterinary School Association-SEAVSA". This association declared on December 7, 2009 in Putra Jaya Malaysia.

To initiate global challenge in veterinary perspective, the SEAVSA successfully recognized their essential influences in improving veterinary services and contributing to the world. Throughout a comprehensive collaboration among veterinary school across South East Asia region, this organization conducted a congress. Faculty of Veterinary Medicine, Bogor Agricultural University has the honor to hold the first agenda of SEAVSA, the First Congress of SEAVSA "Animal Health and Production for Better ASEAN Quality of Life - Challenge of Veterinary Education". Four main topics related to the main theme are veterinary education and profession, biodiversity and biomedical reserach, public health, zoonoses and food safety, anima health, ecohealth and animal production.

From this congress, we have achieving veterinarians, professional, and researcher from related field to communicate their ideas and wealth of knowledge and proposing emerging issues through scientific papers compiled in this proceedings.

Finally, from this congress we hope that SEAVSA can improves their integrity in understanding the new scope of activities and obligations facing them, and collectively embrace a common theme or central discipline that unifies the profession to and create an identify for the public they serve.

Editors

July, 2010

P 18	Sequence Gastrography Technique in Campbell's Dwarf Hamster (<i>Phodopus campbelli</i>) <i>Mokhmad Fakhru Ulum, Deni Noviana, Janto Dwi Haryadi, Ridlyanti Maulida, Sabrina Trisnanda Dachlan, Heryudianto Vibowo</i>	174
P 19	Case Study: Surgical Approach to Remove Subcutaneous Mass Tumors in a Campbell's Dwarf Hamster (<i>Phodopus campbelli</i>) <i>Mokhmad Fakhru Ulum, Sri Nofriyanti Handayani, Yulia Riza, Ranti Asryyuni, Ekowati Handharyani</i>	177
P 20	Drinking Healthy Wild Civet Coffee (Kopi Luwak) <i>M. Winugroho, R. Hidayat, Atik Marijati</i>	180
P 21	Blood Flow Characteristics on Atria-Ventricular Valve as Assessed by Pulsed Wave Doppler Echocardiography in Normal Mongrel Indonesian Dog <i>Marina Wijayanti, Deni Noviana</i>	181
P 22	Antimicrobial Screening of Four Indonesian Medicinal Plant Activity Against <i>Mycoplasma gallisepticum</i> <i>Min Rahminiwati, Aulia Andi Mustika, Soeripto, Andriyanto, Siti Sadiyah, Unang Patriana</i>	183
P 23	The Effect of Sipatah-patah (<i>Cissus quadrangularis Salisb</i>) Extract Administration on Quality of Bone Growth in Normal Growing Female Rats <i>Sabri M, Nurhidayat, K. Sigit, W. Manalu, B. P. Priosoeryanto</i>	185
P 24	Brucellosis on Cattle that will be Transported at Merak Port Banten from Java to Sumatra <i>Rahmat Hidayat, Arum Kusnila Dewi, Eko Sugeng Pribadi, Fachriyan Hasmi Pasaribu</i>	187
P 25	Clinical evaluation of Hydroxyapatite-Chitosan (HA-C) and Hydroxyapatite-Tricalcium Phosphate (HA-TCP) Bone Graft in Sheep's Bone as Animal Model for Human <i>Harry Soehartono, Gendis Aurum Paradisa, Riki Siswandi, M. Fakhru Ulum, Gunanti</i>	189
P 26	Physical and Hematological Parameter of Musang Luwak (<i>Paradoxurus hermaphroditus</i>) <i>Sarmin</i>	191
P 27	Preview of Blood Glucose, Cortisol, and Physical Parameters in Bligon Goats Experiencing Transportation <i>Sarmin, Pudji Astuti, C. Mona Airin, Amelia Hana, Asmarani Kusumawati, Irkham Widiyono, Hera Maheswari, Luthfirda Sjahfirdi, Mitra S, Bashori, Ariani Hasan</i>	193

BRUCELLOSIS ON CATTLE THAT WILL BE TRANSPORTED AT MERAK PORT BANTEN FROM JAVA TO SUMATRA

Rahinat Hidayat^a, Arum Kusnila Dewi^b, Eko Sugeng Pribadi^a, Fachriyan Hasmi Pasaribu^a

^aDivision of Medical Microbiology, Department of Animal Disease and Veterinary Public Health Science,
Faculty of Veterinary Medicine, Bogor Agricultural University

^bAgricultural Quarantine Agency, Ministry of Agricultural of Republic Indonesia

Keywords: Brucellosis, cattle, RBT, CFT, I-ELISA

Introduction

Brucellosis is an infectious disease related to employment, such as milkman, laboratory workers, veterinarians, inseminator, breeders, breeding cattle and others. Course of the disease process caused by *Brucella abortus* in cattle starts with the entry of bacteria into the body through the mucous membrane of the eyes penetration, mucous membranes of reproductive tract, digestive tract, mouth, skin and respiratory tract (Hirsh *et al.* 2004). The main source of transmission of *B. abortus* in cattle is through the uterine fluid, placental tissue of fetus, colostrum and milk from cows patients (Quinn *et al.* 2006). *B. abortus* is a facultative intracellular (anaerobic) that able to survive and thrive well in phagocytic cells (macrophages). *B. abortus* can also cause infertility, reproductive anomalies, death early pedet and miscarriage in sensitive livestock group.

Materials and Methods

Research has been conducted in Faculty of Veterinary Medicine Bogor Agricultural University, BKP Class II Cilegon and BBALITVET use of RBT, CFT, I-ELISA and SDS-PAGE testing methods since January to October 2008. Serum obtained from cows originating from province of East Java, Central Java, Yogyakarta, West Java, Jakarta and Banten. The number of samples obtained in stages (*multiple states*), according to the frequency of expenditure and population per conveyance. The materials used were reagent RBT (BBALITVET), complement 10%, hemolysin (with dilution 1:100), hemolysin (with dilution 1:150), red blood cells of sheep 4%, coagulant of Na citrate (Sigma) 3.85%, NaCl (Oshaka) 0.95%, indirect I-ELISA Kits (SERELISA[®] Mono Indirect antibody *Brucella* OCB), the positive control serum (BBALITVET), buffer peroxidase substrate (PS) (SERELISA[®] Mono Indirect antibody *Brucella* OCB), washing buffer (W) (SERELISA[®] Mono Indirect antibody *Brucella* OCB), sample diluent (SD) (SERELISA[®] Mono Indirect antibody *Brucella* OCB), the collecting solution and gel (*stacking gel*) 4% (Sigma Chemical), gel separator (*separating gel*) 12% (Sigma Chemical), running buffer (Promega) 2,76%, phosphat Buffer Saline PBS (Promega), and *coomasie blue* (Sigma Chemical) 0,1%.

Results and Discussions

Results of a number of 173 serums inspection to *B. abortus*. Positive RBT is 0 sample. Positive CFT are 33 samples. Positive I-Elisa is 1 sample (Table 1).

Table 1. Positive Results by RBT, CFT, I- ELISA testing methods

No.	Origin	Sample	Methods		
			RBT (%)	CFT (%)	I-I-ELISA (%)
1	East Java	31	0	5 (16,1%)	0
2	Cetral Java and DIY	60	0	11 (18,3%)	0
3	West Java	72	0	15 (20,8%)	1 (1,4%)
4	Jakarta	4	0	0	0
5	Banten	6	0	2 (33,3%)	0
Total		173	0	33	1

Electrophoresis result obtained from cattle serum at group of character of protein Ig (A and B) that is protein ribbon between 225-175 kDa represent the IgG, 75-50 kDa represent the IgG which heavy BM that is IgG1, below 50 kDa showing the journey of infection *Brucella*, between 50-35 kDa represent the shares enchain the weight of IgG that is Fc and residing in between 25 kDa represent to enchain light of IgG that is Fab. Protein Ribbon below 25 kDa showing the natural infection reaction at animal and represent the reaktifitas from T-cell (Figure 1).

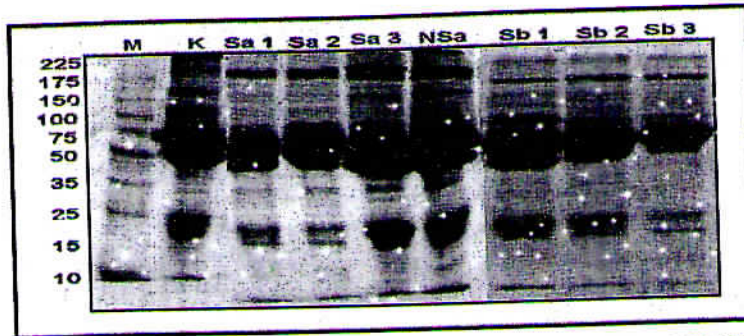


Figure 1. SDS-Page Results from Positive Serum by CFT and ELISA

Parallel interpretation from RBT to CFT and I-Elisa to CFT own the meaning as a whole that is if one test of among from parallel is positive, hence result of the diagnostic test positive. Result of sensitifitas obtained high, hence low spesifisitas. Serial interpretation from RBT to CFT and I-Elisa to CFT own the meaning as a whole that is both of test from serial is positive, hence result of the diagnostic test positive. Result sensitifitas obtained low, hence high spesifisitas (Table 2).

Table 2. Serial and Parallel Interpretation RBT, CFT and ELISA

No	RBT	CFT	Cattle
1	+	+	0
2	+	-	0
3	-	+	33
4	-	-	140
Sum up the Serum Samples			173
Interpretation Paralel (P)			Sensitifitas 33/173 = 19,10%
Interpretation Serial (S)			0/173 = 0%
(P)			Spesifisitas 140/173 = 80,92%
(S)			173/173 = 100%
No	i-I-ELISA	CFT	Cattle
1	+	+	1
2	+	-	0
3	-	+	32
4	-	-	140
Sum up the Serum Samples			173
(P)			Sensitifitas 33/173 = 19,10%
(S)			1/172 = 0,58%
(P)			Spesifisitas 140/173 = 80,92%
(S)			172/173 = 99,42%

Conclusion

The final result is method of diagnosa Brucellosis at 173 serum samples that is CFT more sensitive compared by RBT and ELISA method more specific from CFT.

References

- Hirsh DC, Maclachlan NJ, Walker RL. 2004. *Veterinary Microbiology*. 2nd Ed Australia. Blackwell publishing.
 Quinn PJ, Markey BK, Carter ME, Donnelly WJ, Leonard FC. 2006. *Veterinary Microbiology and Microbial Disease*. Australia. Blackwell publishing.