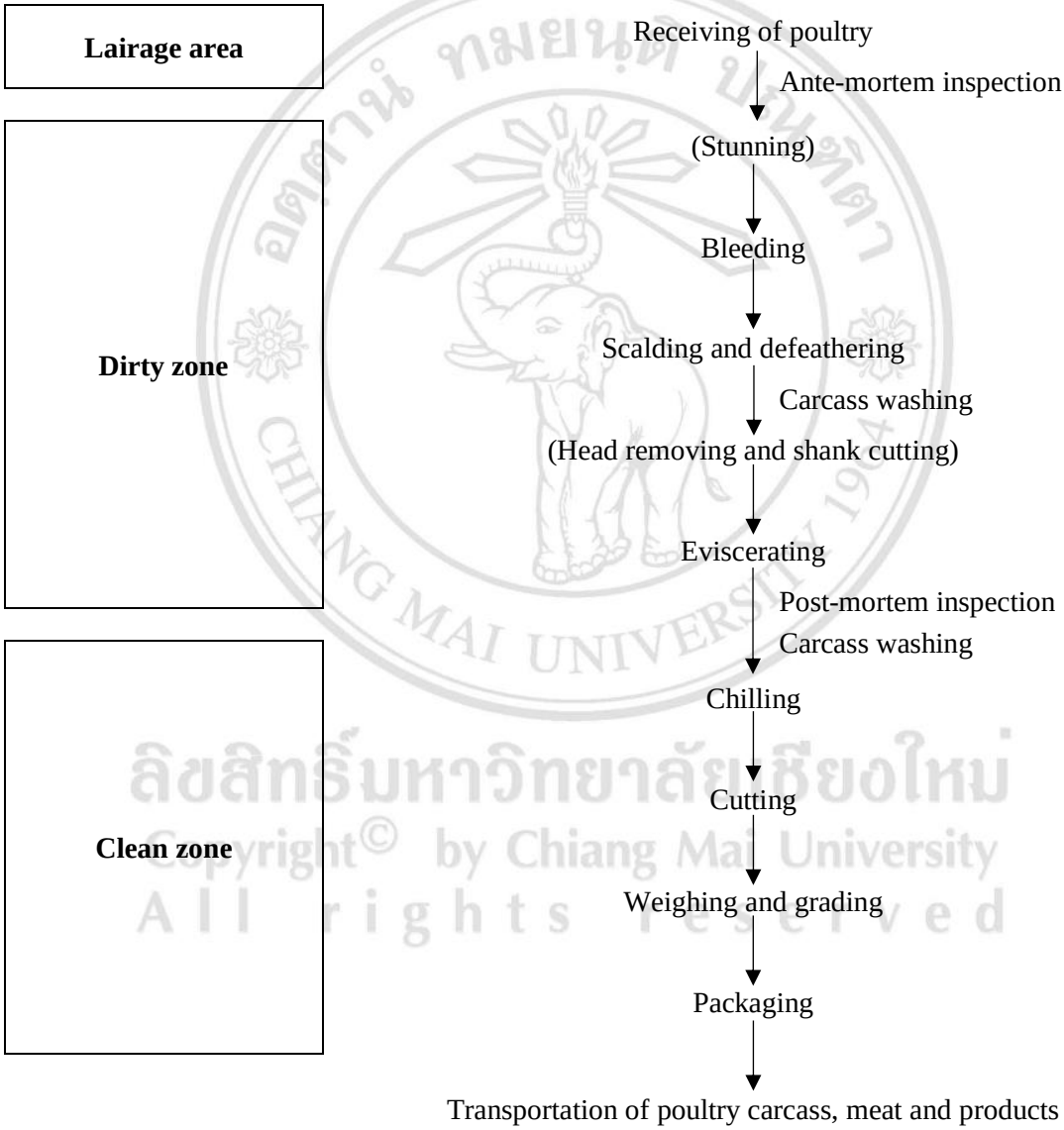
APPENDIX A

Flowchart of standard processing steps

(Thailand Ministry of Agriculture and Cooperatives, 2006)



Note: Stunning, head removing and shank cutting steps can be omitted where necessary or appropriate.

APPENDIX B

Composition and preparation of reagent

Phosphate buffered saline (PBS)

1,000 ml of 1X phosphate buffered saline (PBS)

Composition

Sodium chloride	8.0 g
Potassium chloride	0.2 g
Disodium hydrogen phosphate	1.44 g
Potassium dihydrogen phosphate	0.24 g
Distilled water	1,000 ml

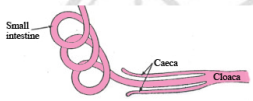
Preparation

Dissolve the components in distilled water. Adjust the pH, if necessary, so that after sterilization it is 7.4 ± 0.2 at 25 ^{o}C. Dispense the basic medium into glass bottle. Sterilize in the autoclave set at 121 ^{o}C for 15 min.

APPENDIX C

Laboratory procedures

Sample preparation



10 g of chicken cecum and small intestine

OR

Whole chicken carcass

Add with 90 ml sterile PBS (10^{-1} dilution)

Rinse with 200 ml PBS, 5 min shaking

Homogenize by stomacher, 2 min

25 ml rinsing suspension

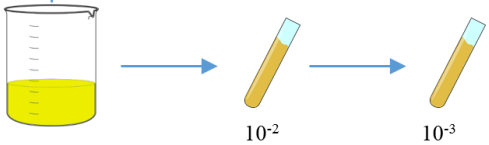
10 ml homogenized suspension

Add with 90 ml Bolton broth + supplement and 5% laked horse blood

Add with 225 ml Bolton broth + supplement and 5% laked horse blood (10^{-1} dilution)

Homogenize with stomacher, 2 min

Make a 10-fold dilution using PBS

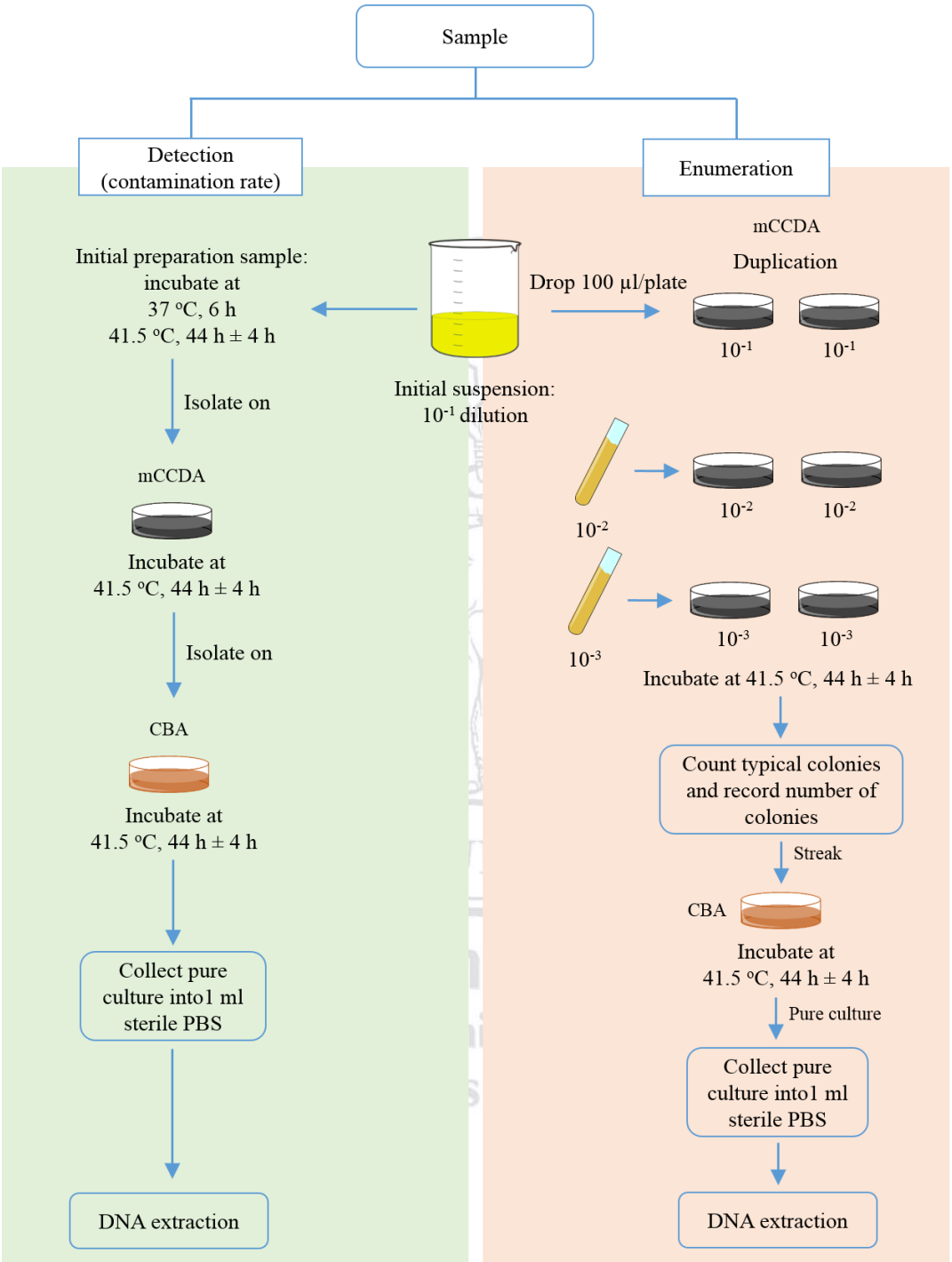


Initial suspension: 10^{-1} dilution

10^{-2}

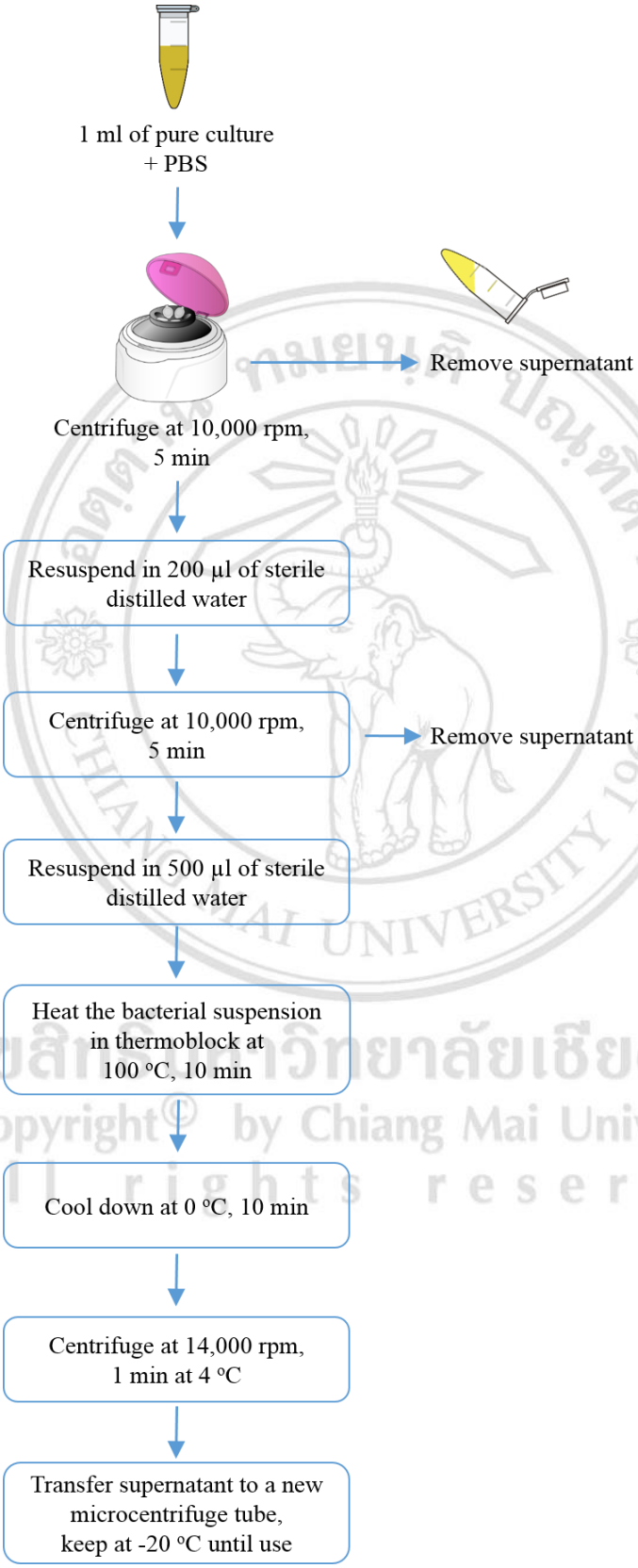
10^{-3}

Procedures of *Campylobacter jejuni* detection and enumeration using direct counting method

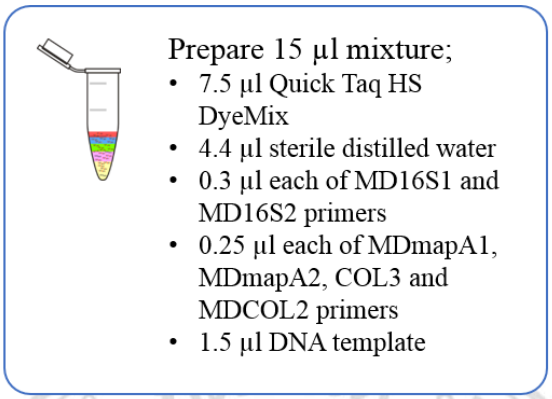


After confirmation with multiple PCR, all samples positive to *Campylobacter jejuni* are recorded. For enumeration, positive isolates are traced back to number of colonies recorded at the beginning and level of *C. jejuni* of each sample are reported in the unit of log CFU/g or log CFU/ml.

DNA extraction procedure



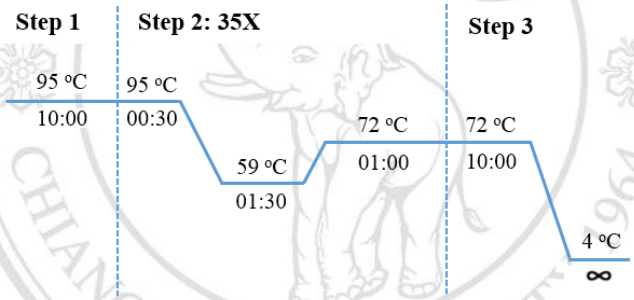
Multiplex PCR and gel electrophoresis procedures



Prepare 15 µl mixture;

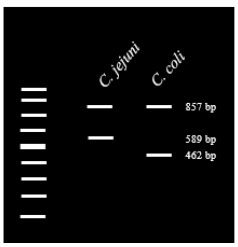
- 7.5 µl Quick Taq HS DyeMix
- 4.4 µl sterile distilled water
- 0.3 µl each of MD16S1 and MD16S2 primers
- 0.25 µl each of MDmapA1, MDmapA2, COL3 and MDCOL2 primers
- 1.5 µl DNA template

Perform multiplex PCR under the condition



Run gel electrophoresis
1.5% agarose gel (+ Redsafe™)
110V, 30 min

View the gel under UV light
(302 nm) and record results



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Proceedings Publications

Jainonthee, C., Pothipik, R., Na Lampang, K., Pichpol, D., Meeyam, T. (2016, September 4-8). The use of Polymerase Chain Reaction in Vibrio parahaemolyticus identification applied in Most Probable Number method. In P. H. Clausen, M. P.O. Baumann & A. M. Nijhof (Eds.), *Tropical Animal Diseases and Veterinary Public Health: Joining Forces to Meet Future Global Challenges*. Paper presented at the First Joint AITVM – STVM Conference, Berlin (pp. 151). Giessen: Verlag der DVG Service GmbH.

Jainonthee, C., Chaisowwong, W., Meeyam, T., Chanayat, Y., Ngamsanga, P., Pichpol, D. (2017, February 10-11). Microbiological quantitative assessment of poultry carcasses from large-scale slaughterhouses in Chiang Mai province, Thailand. In T. Meeyam, D. Pichpol, W. Chaisowwong, C. Jainonthee, P. Ngamsanga, … & C. Kumlor (Eds.), *The 3rd Researchers Conference of Emerging Disease at Convergence of Animal, Human and Environmental Health.* Paper presented at the GHI - Thailand 2017 Conference, Chiang Mai (pp. 28). Chiang Mai: Veterinary Public Health Centre for Asia Pacific.

Professional Experience

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Field of Interests

Food safety, One Health, Molecular biology