

PRDC CONTROL BY MANAGEMENT STRATEGY

Shunichi Shinozuka DVM,MS
Global Pig Farms, Inc.

Invited by Nisseiken Co.Ltd-JAPAN , Supervet
22nd PINOY PORK CHALLENGE
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グローバルピッグファーム株式会社

Farm profile

- Sow number 600
- Farrow to finish
one site operation
- Disease status
 - PRRS(+)
 - APP(+)
 - MPS(+)
 - AD(—)
 - PCV2-PCR(—)

Production DATA in 2009

- Farrowing rate 83.3%
- Litters/S/Y 2.34
- PW/S/Y 22.19
- Mkt/S/Y 21.56
- Suckling pig mortality 7.3%
- Post weaning mortality 3.2%
- ADG 769g/d
- Average Feed Intake 2240g/d
- Feed conversion 2.92

Not so bad More productivity More profitability

PRRS control challenge

by changing pig flow after weaning

- Complete all-out every pig house
- Scheduled down-time
- Changing pig density
 - Nursery house; $0.38 \text{ m}^2/\text{pig}$
 - Fattening house; $0.7 \text{ m}^2 \rightarrow 0.81 \text{ m}^2/\text{pig}$
- Achieve biosecurity compliance
- Shower in/out
- Monitoring and record of all data/information
- Goal; Control PRRS at the stage of fattening period by initiating control program after weaning

Finisher 6 (partially GDU)

Cold Nursery

Farrowing2

Hot Nursery

Farrowing1

Gestation2

Gestation 1

Finisher 5

Finisher 4

Finisher 3

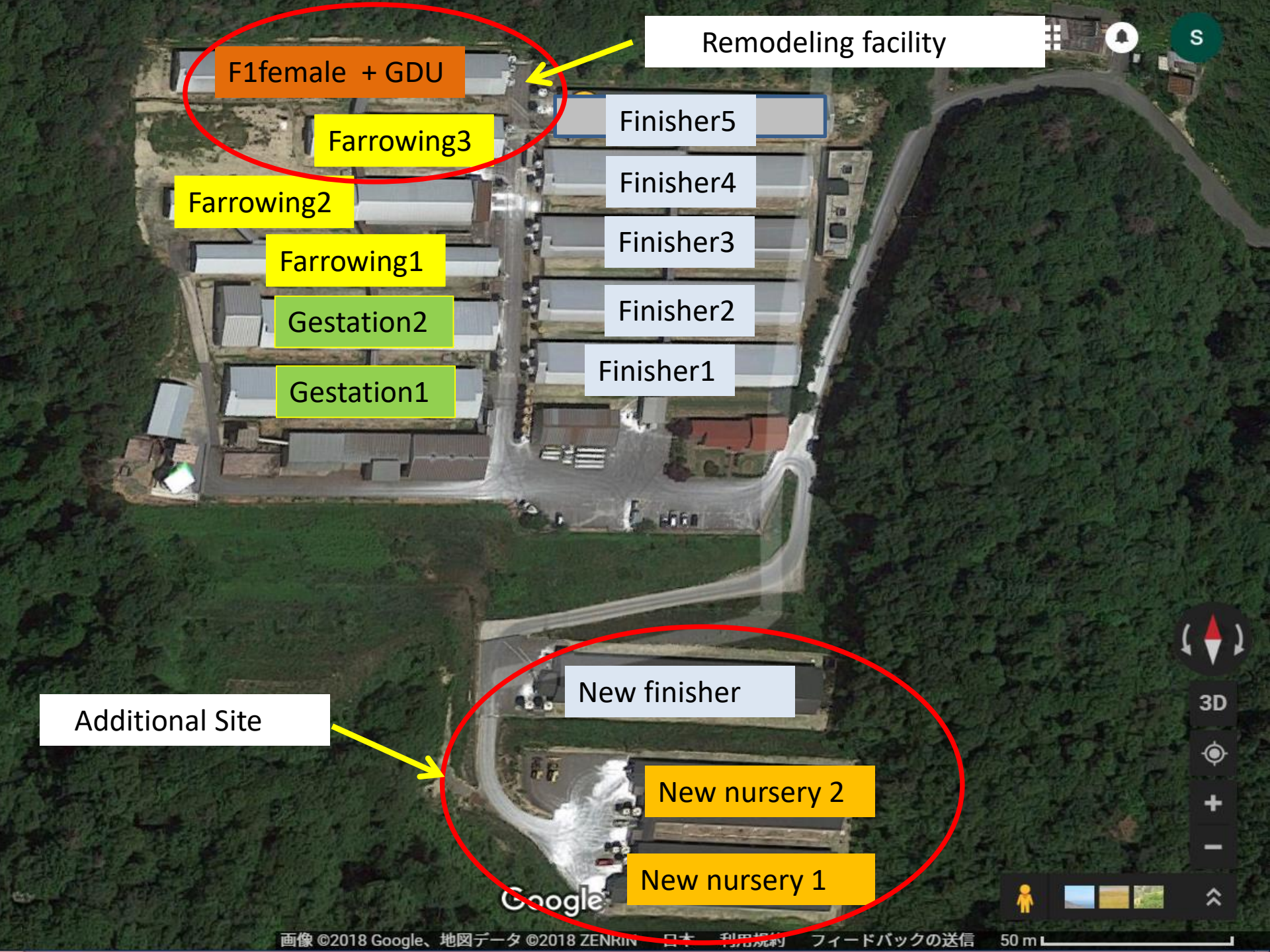
Finisher 2

Finisher 1

Google

Changing Pig Flow below

- Build new nursery and fattening house
- Changing house function
 - Growing H.
 - ⇒ Farrowing H.
 - Fattening H.
 - ⇒ Gilt Development Unit (GDU)
- 200 pigs weaning /Week
- 200 Weaned pigs/Room
- 400 Fattening pigs/Room
- Fattening house has 2rooms each
- All-out management every pig house and One week of Down-time



Remodeling facility

F1female + GDU

Farrowing3

Finisher5

Farrowing2

Finisher4

Farrowing1

Finisher3

Gestation2

Finisher2

Gestation1

Finisher1

Additional Site

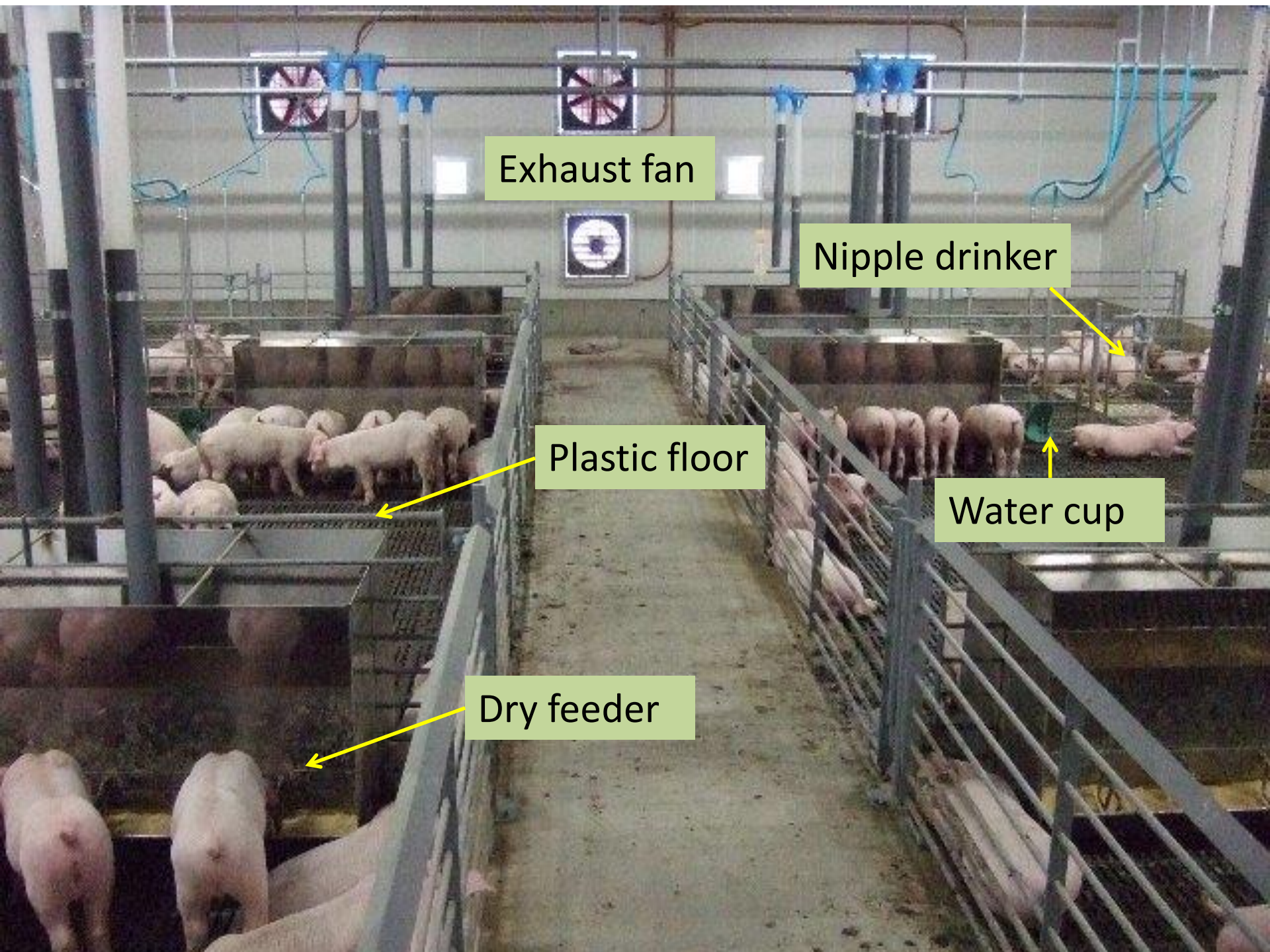
New finisher

New nursery 2

New nursery 1

New nursery





Exhaust fan

Nipple drinker

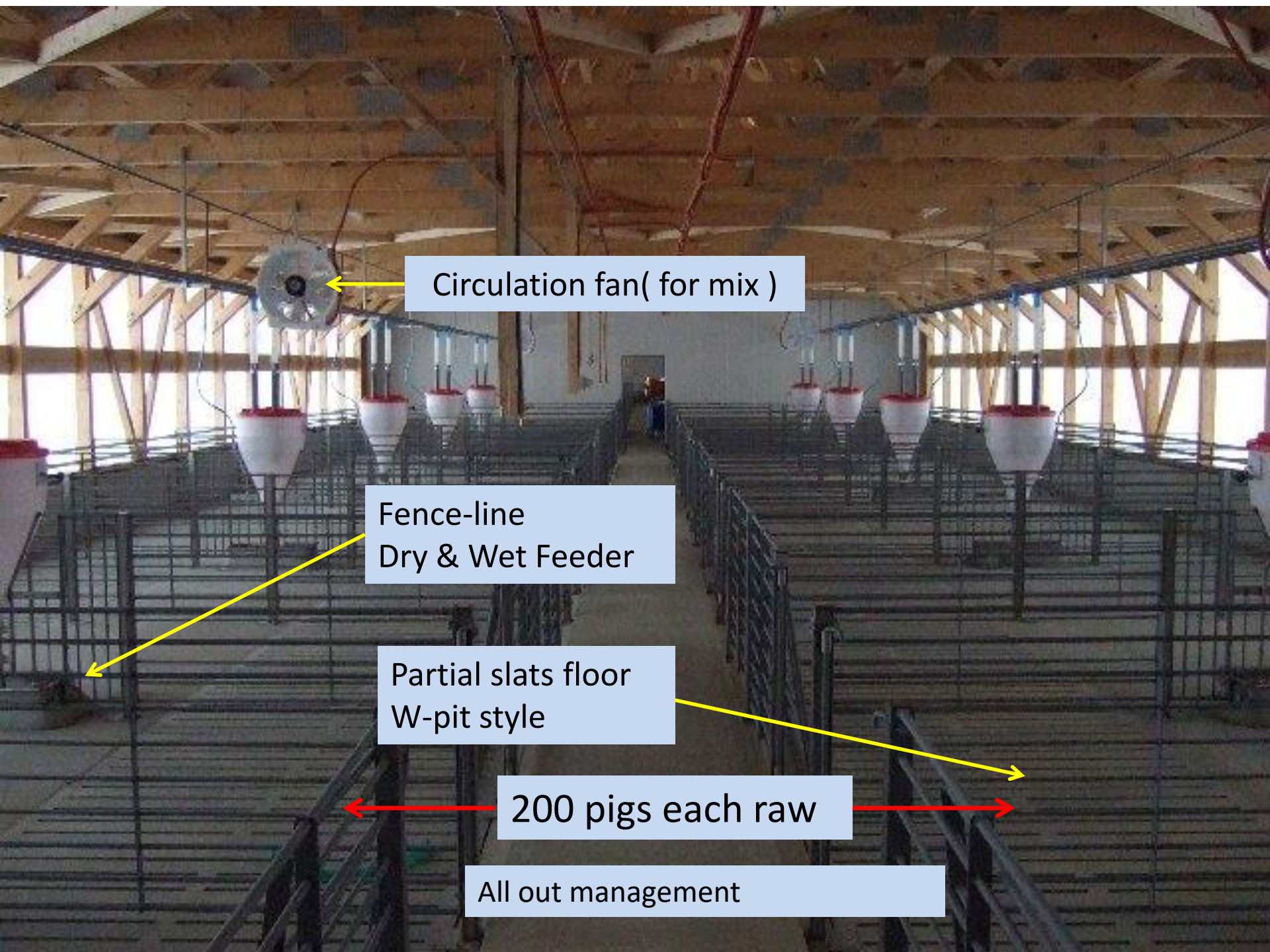
Plastic floor

Water cup

Dry feeder

New finisher





Circulation fan(for mix)

Fence-line
Dry & Wet Feeder

Partial slats floor
W-pit style

200 pigs each raw

All out management

Start strict ALL OUT flow
since Nov.2009

Assessment PRRS Control Program

Step-1

- Serological test (PRRS , App)
 - Confirm ELISA negative before move to fattening house per lot
 - Confirm ELISA negative at late stage of Fattening (Periodical two times test per year)
- Inspection of lung lesion at slaughter house
 - MPS lesion (Classified three rank by severity)
 - Pleurisy lesion (Suspect of App infection)
 - Lung abscess (Suspect of App infection)

Assessment PRRS Control Program

Step-1

- Productivity records
 - Average Daily Gain (ADG)
 - Days to Market
 - Post weaning mortality
 - Average Feed intake

PRRS depopulation (Serological test)

2009.3/2009.9 2010.3/2010.9 2011.3/2011.9 2012.3

1Month	0.074	—	0.010	—		0.013	—	0.018	—	0.073	—	0.104	—	0.000	—
	0.119	—	0.055	—		0.040	—	0.016	—	0.111	—	0.769	+	0.087	—
	0.591	+	0.382	—		0.064	—	0.041	—	0.156	—	0.021	—	0.066	—
	0.185	—	0.083	—		0.004	—	0.027	—	0.042	—	0.008	—	0.000	—
	0.073	—	0.088	—		0.028	—	0.049	—	0.000	—	0.045	—	0.000	—
	0.014	—	0.014	—				0.002	—	0.100	—	0.046	—	0.000	—
2Months	0.019	—	0.078	—		0.015	—	0.045	—	0.024	—	0.147	—	0.000	—
	0.012	—	0.012	—		0.021	—	0.000	—	0.138	—	0.013	—	0.000	—
	0.038	—	0.038	—		0.108	—	0.021	—	0.017	—	0.000	—	0.000	—
	0.014	—	0.036	—		0.000	—	0.039	—	0.028	—	0.023	—	0.000	—
	0.156	—	0.062	—		0.019	—	0.062	—	0.014	—	0.000	—	0.000	—
	0.047	—	0.003	—										0.010	—
2.5Months	0.038	—	0.057	—										0.000	—
	0.053	—	0.010	—										0.000	—
	0.045	—	0.002	—		0.067	—	0.049	—	0.035	—	0.012	—	0.000	—
	0.032	—	0.003	—		0.292	—	0.072	—	0.024	—	0.017	—	0.000	—
	0.053	—	0.016	—		0.012	—	0.105	—	0.048	—	0.008	—	0.000	—
	0.034	—	0.016	—				0.002	—	0.022	—	0.000	—	0.000	—
3Months	1.530	+	0.010	—		0.231	—	0.008	—	0.000	—	0.015	—	0.000	—
	0.721	+	0.016	—		0.137	—	0.072	—	0.047	—	0.066	—	0.000	—
	0.047	—	0.485	+		0.618	+	0.070	—	0.020	—	0.000	—	0.000	—
	0.095	—	0.390	—		0.998	+	0.047	—	0.000	—	0.000	—	0.000	—
	0.043	—	0.050	—		0.384	—	0.078	—	0.039	—	0.053	—	0.000	—
	0.085	—	0.062	—				0.020	—	0.003	—	0.033	—	0.085	—
4Months	0.051	—	0.644	+		0.999	+	0.031	—	0.003	—	0.002	—	0.059	—
	0.032	—	0.43	+		0.999	+	0.057	—	0.251	—	0.005	—	0.000	—
	0.069	—	0.43	+		0.069	—	0.010	—	0.006	—	0.014	—	0.000	—
	0.047	—	0.32	+		0.135	—	1.066	+	0.008	—	0.000	—	0.000	—
	0.018	—	0.6	+		0.018	—	0.014	—	0.000	—	0.000	—	0.000	—
	0.018	—	0.6	+		0.018	—	0.003	—	0.000	—	0.000	—	0.020	—
4.5Months	0.877	+	0.6	+		0.877	+	0.016	—	0.801	+	0.000	—	0.014	—
	1.224	+	0.6	+		1.224	+	0.016	—	0.801	+	0.000	—	0.014	—
	0.999	+	0.6	+		0.999	+	0.020	—	0.045	—	0.025	—	0.000	—
	0.920	+	0.684	+		0.920	+	0.045	—	0.025	—	0.000	—	0.000	—
	1.121	+	0.684	+		1.121	+	0.027	—	0.000	—	0.000	—	0.000	—
	0.726	+	0.686	+		0.726	+	0.027	—	0.000	—	0.000	—	0.000	—
≥ 6Months	2.018	+	0.416	+		0.555	+	0.027	—	0.000	—	0.000	—	0.000	—
	0.670	+	0.848	+		0.555	+	0.164	—	0.000	—	0.000	—	0.000	—
	0.839	+	0.698	+		0.902	+	0.006	—	1.537	+	0.072	—	0.000	—
	0.408	+	0.695	+		1.052	+	0.020	—	0.934	+	0.066	—	0.000	—
	0.315	—	0.538	+		0.755	+	0.016	—	2.137	+	0.024	—	0.000	—
	0.454	+	0.774	+				0.053	—	1.135	+	0.020	—	0.000	—
	0.283	—	0.993	+				0.000	—	0.021	—	0.086	—		
	0.292	—	0.748	+				0.002	—	0.104	—	0.000	—		

All Out Program start

POSITIVE

Turn to
ELISA-NEGATIVE

Nursery stage

Fattening stage

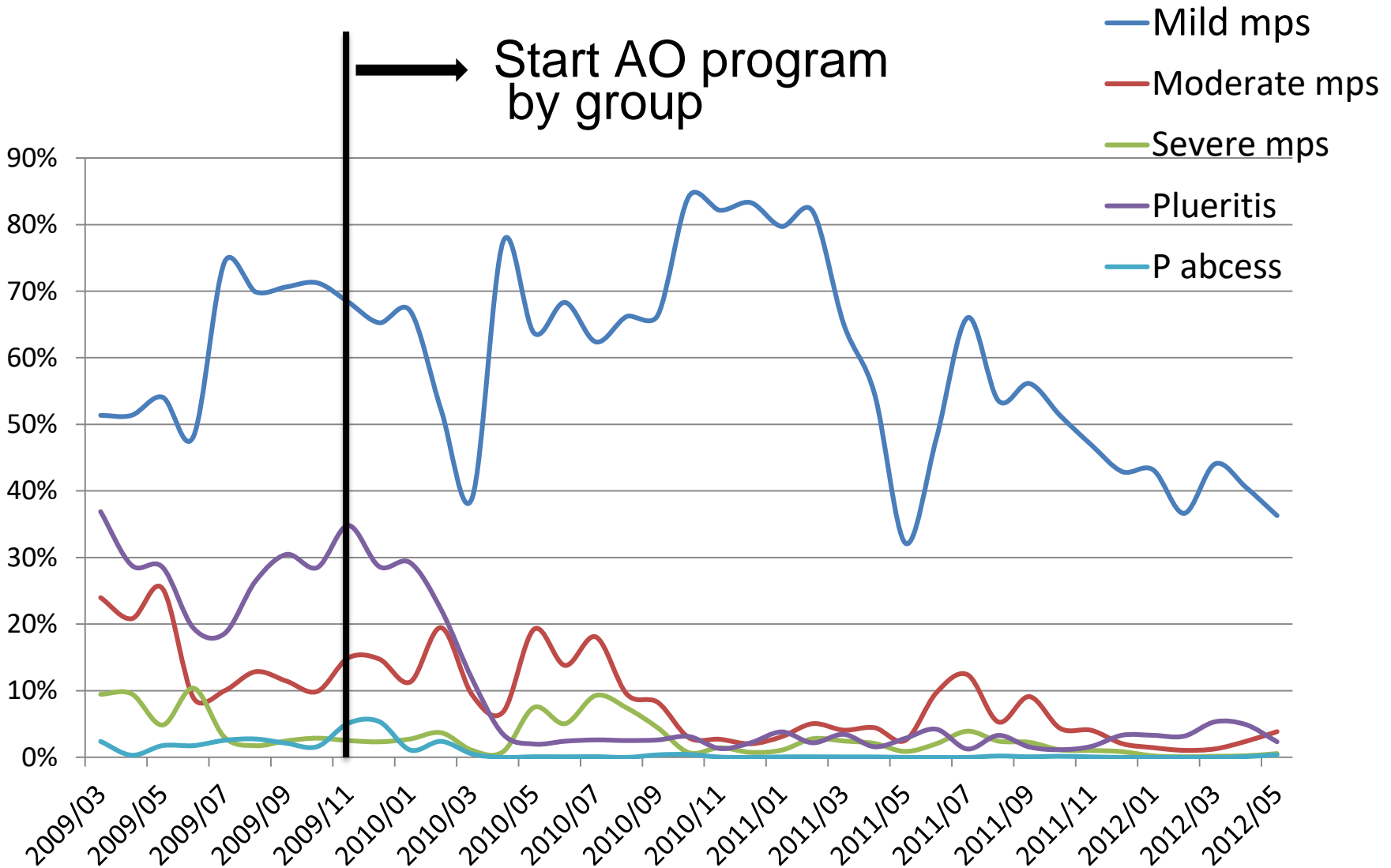
App depopulation of finishing stage

[illegible]

Scoring of slaughter pigs lung

- Mycoplasma-like pneumoniae
 - Mild lung region 0-20%
 - Moderate lung region 20-40%
 - Severe lung region 40% or over
- Counts occurrences of pleuritis and pulmonary abcess

Lung score of slaughter pigs

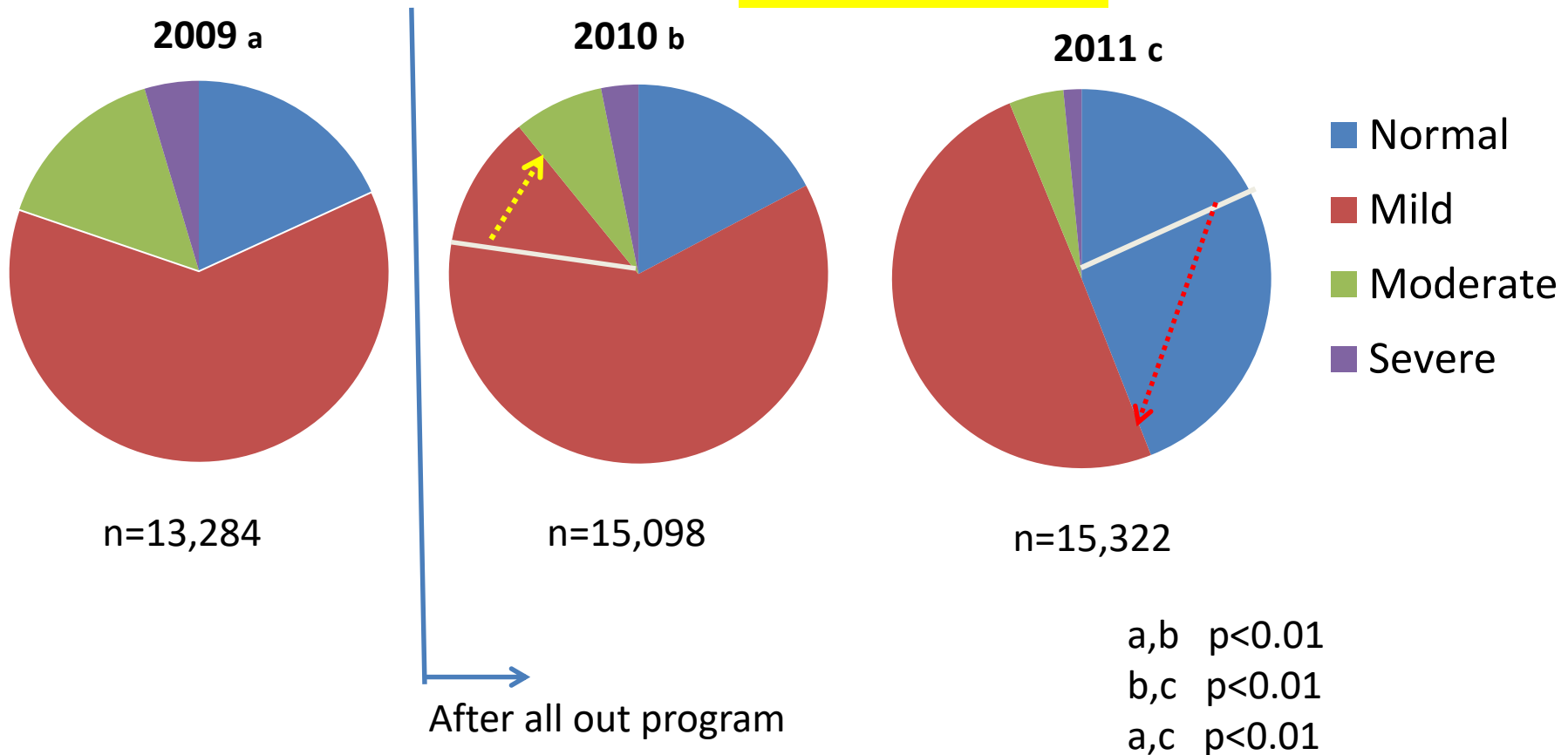


Mycoplasma-like lung score of slaughter pigs

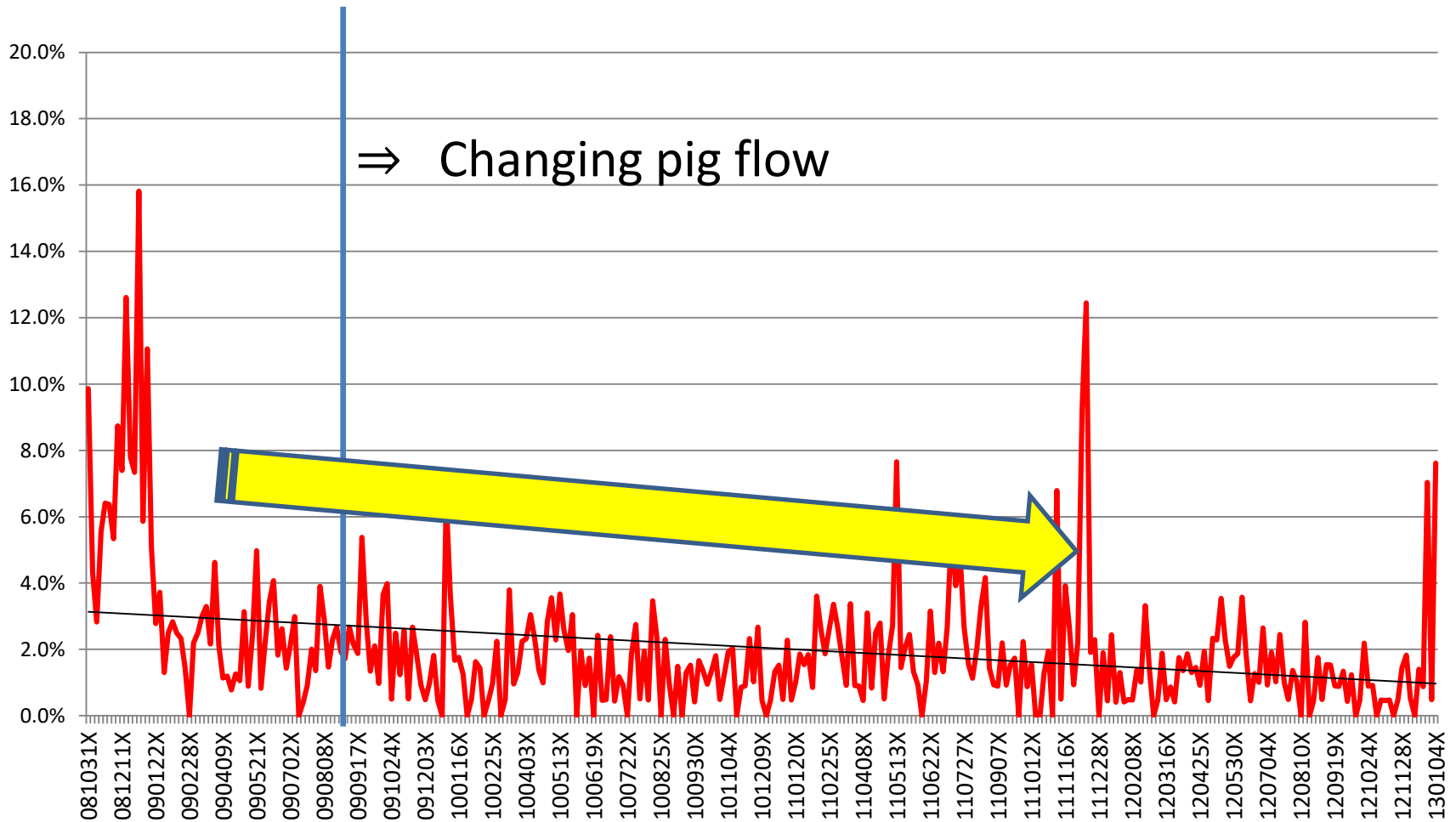
Moderate ↓
Mild ↑

Normal ↑
Mild, Moderate ↓
Severe ↓

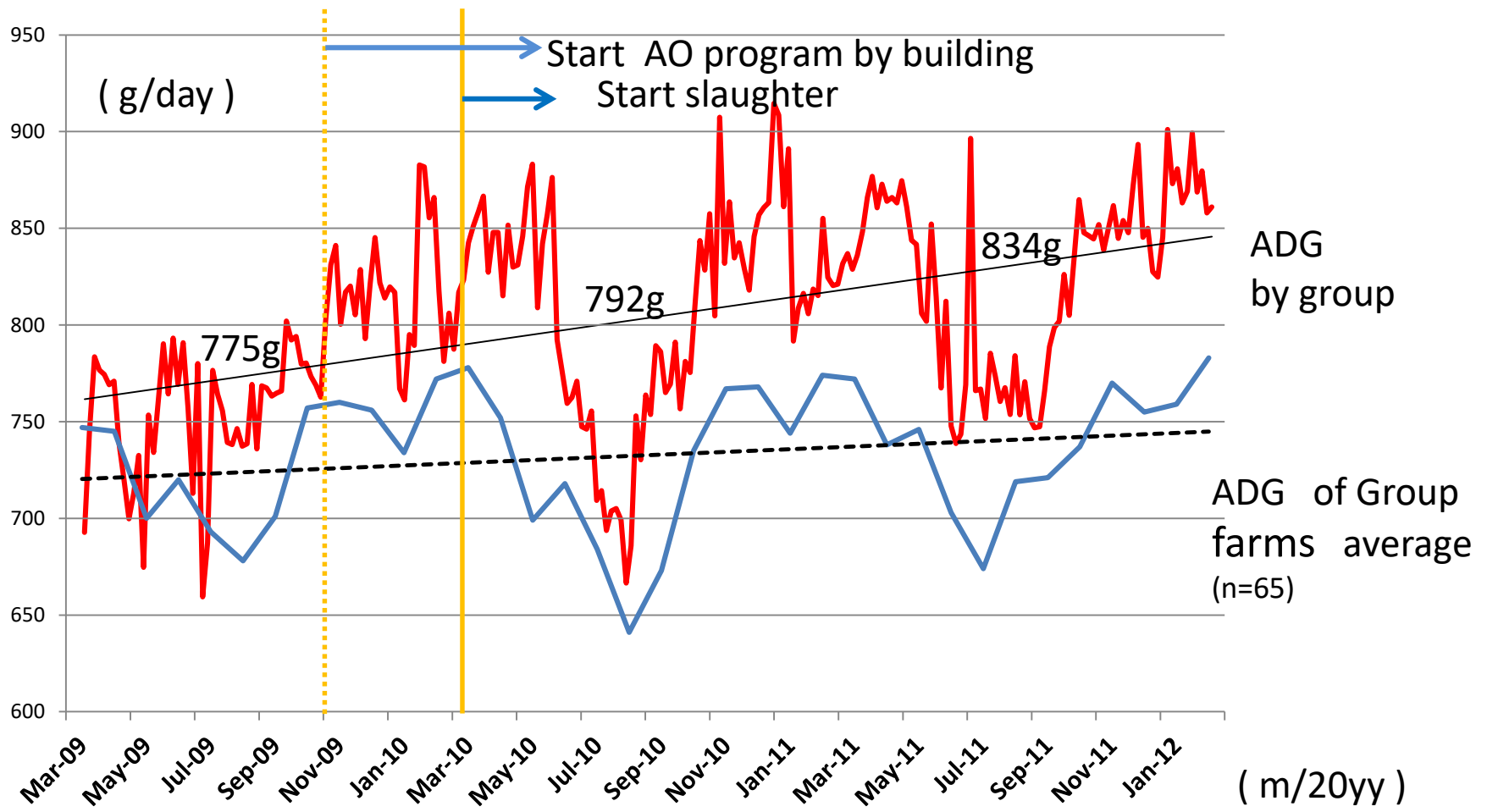
Year basis data
Statistically significant



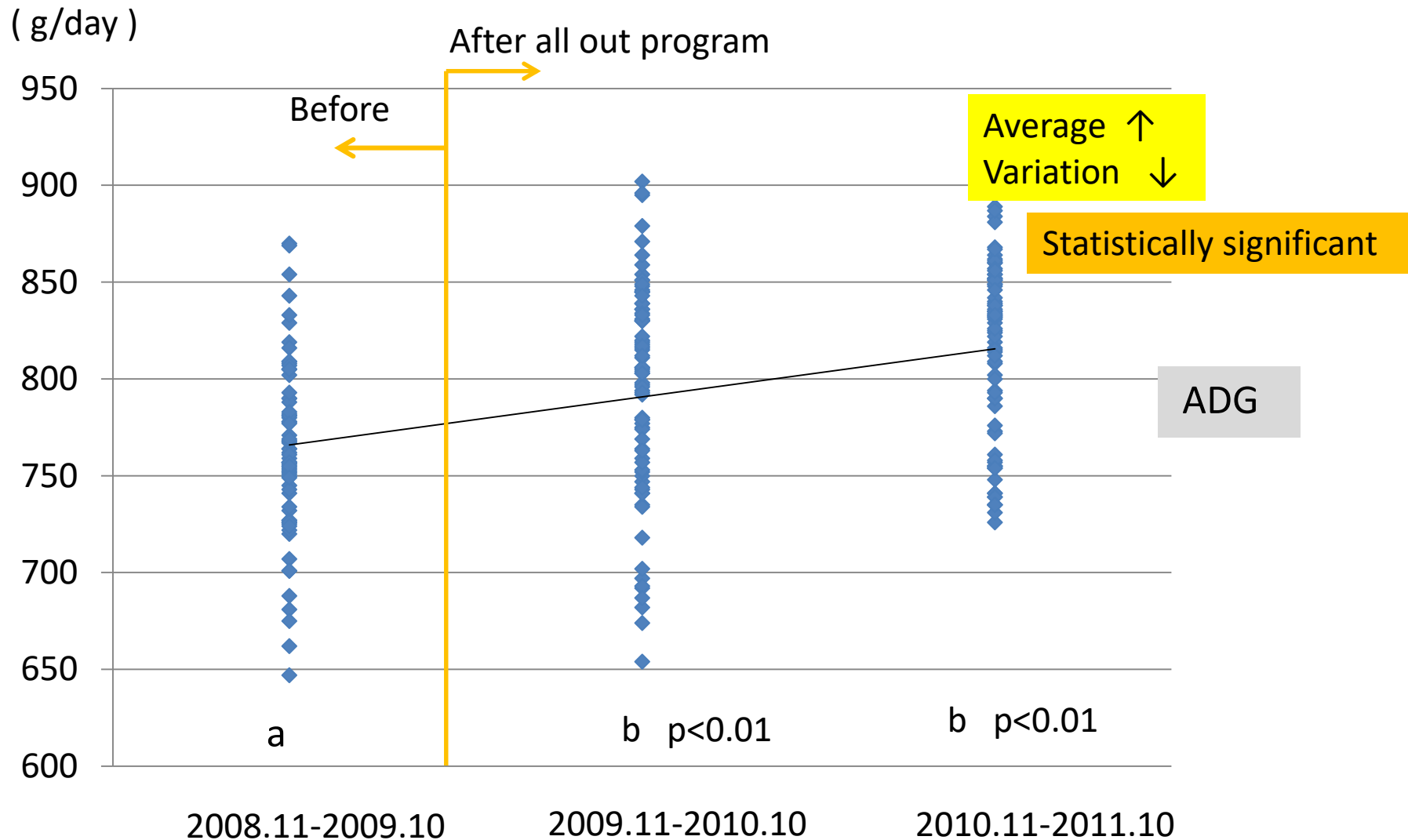
Post weaning mortality by group



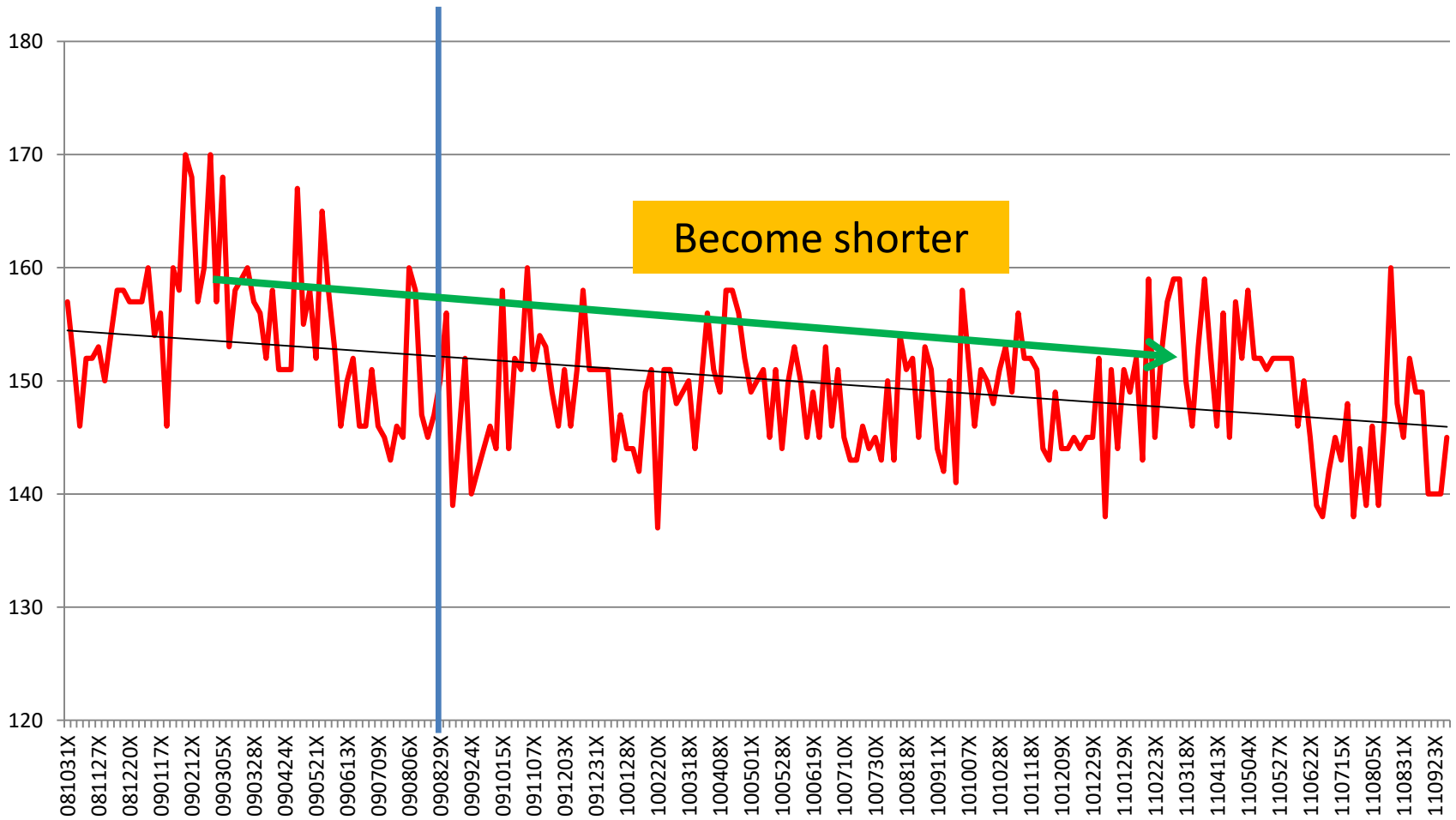
Average daily gain by group vs Group farms average



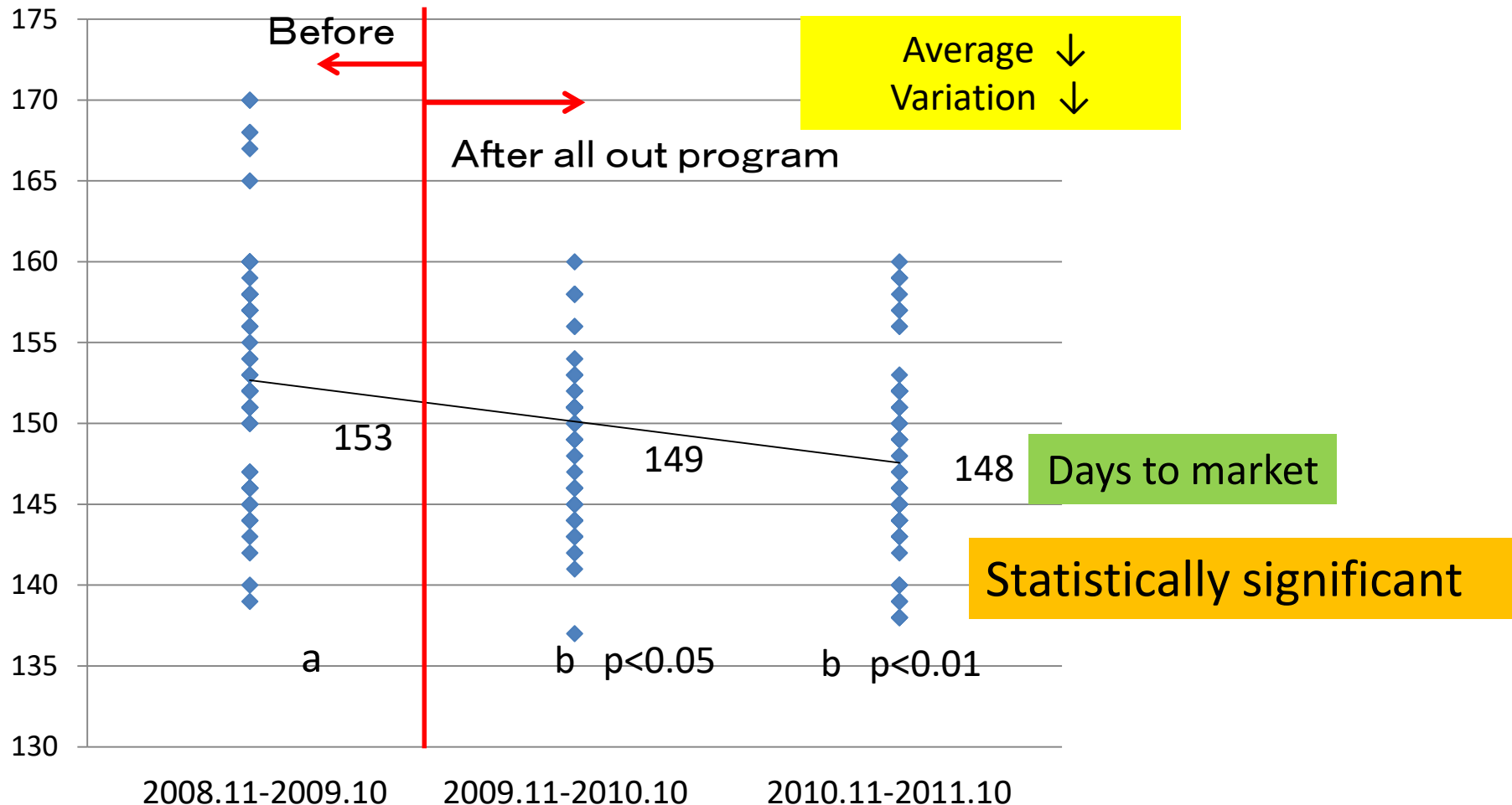
Group comparison by Average Daily Gain



Days to market by group



Group comparison by Days to market



Summary

- PRRS and App control could be achieved by well programmed All-out and Biosecurity
- Significant improvement of swine productivities have been done by Controlling PRRS and App

Thank you for your attention!

ご静聴ありがとうございました！



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