

Use of a critical point questionnaire as part of PRRS management in 53 French farms



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INTRODUCTION

Porcine reproductive and respiratory syndrome (PRRS) control requires a global approach to be successful. For this purpose Boehringer Ingelheim has developed a systemic approach, the "5-step" process which includes the following steps: 1/identify desired goals; 2/ Determine current PRRS status; 3/ Understand current constraints; 4/ develop solution options; 5/ Implement and monitor preferred solutions. As part of the third step, identifying the critical points which contribute to maintain PRRS virus circulation is crucial. To list these points a dedicated questionnaire has been used in 53 French farms. The objective of this work is to provide a summary of the results obtained.

MATERIALS AND METHODS

From July 2015 to June 2017, 53 French farms with a project of PRRS control were investigated. During these visits, a questionnaire divided in 4 parts (external and internal biosecurity, management and hygiene) and including 62 criteria to be evaluated was performed. Each criterion was scored: "0" if the criterion was not compliant or "1 to 3" if the criterion was compliant and depending on its weight^{1,2}. The maximum rating for an "ideal" farm was 100. The farm visit was divided in 2 parts. The first one to fill in the grid took place in the farm office room. The second one was dedicated to the farm building visit. At the end of the visit, a report was drafted and discussed with the farmer and all stakeholders.

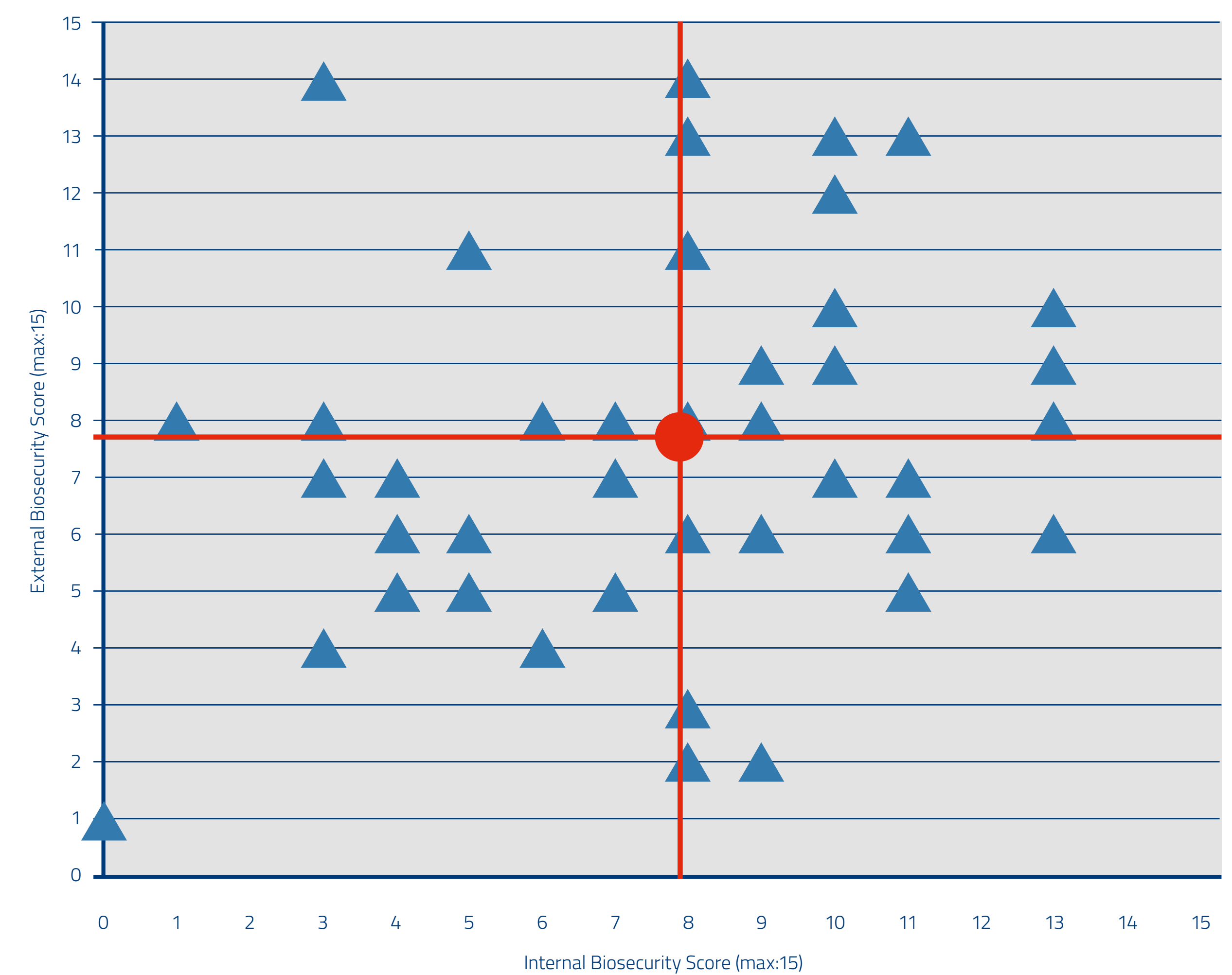
RESULTS

The total mean score was 59/100 with external biosecurity: 7.7/15, internal biosecurity: 7.8/15, management: 25.7/40 and hygiene: 17.6/30. Most well controlled measures, met in more than 80% of the farms were: washing and disinfecting after emptying rooms, no held-back piglets in the farrowing room, known status of gilts supplier, rodents' control.... Most important criteria that did not comply in more than 60% of the farms were: no perimeter fence, no correct farm entry room, no specific clothes per farm sectors, no washing and disinfecting of the disposal tank...

Figure 1 displays the mean scores of internal biosecurity (X axis) and the mean scores of external biosecurity (Y axis). We observed a great variability between the evaluated herds. Most of herds with an external biosecurity score above the mean have in most of cases an internal biosecurity above the mean too.

Figure 1: Mean scores of external and internal biosecurity

(1 triangle = mean score for 1 farm; Red cross = mean score for the 53 farms)



DISCUSSION AND CONCLUSION

The herds included in this work were not selected at random and are therefore not representative of the French farms. However all of them wanted to implement a PRRS control plan and the farmers were motivated. So they were proactive for answering the questionnaire. The grid that was used in this study allowed listing the constraints but it is not sufficient. As often as possible a feasible solution was proposed. Then a realistic action plan, based on vaccination and sanitary measures to control PRRS with the highest probability of success was elaborated.

According to Calvar et al³, biosecurity / farm management recommendations are often not implemented because of psychological, economical and technical barriers. The use of tools, like COMBAT™, including scoring systems and benchmarking of farm among a group of herds might have an educational value for the farmers.

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