



D-3.1 Implementation of MAD-VIR to INIA, APHA and PIWET

JRP5 - MAD-VIR - ET1 - 1st Call

Responsible Partner: SSI



GENERAL INFORMATION

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Implementation of MAD-Vir to INIA, APHA and PIWET

In the initial project proposal the microarray technology was only to be implemented at INIA and APHA, however PIWET was very interested in learning the technology and because they already had all the microarray equipment and were able to finance the technology transfer without any additional costs to the project, it was decided to expand the technology transfer to PIWET also.

Technology transfer

In order for INIA, APHA and PIWET to use the non-commercial custom made SSI PanVirus microarray v2 design, a special agreement between SSI and Agilent, Denmark had to be created. Normally other Institutes can be invited to use a custom-made microarray design through Agilent eArray; however, this normal procedure does not protect the design, which means that all probe sequences will be public. We therefore had to create a special agreement with Agilent, Denmark in order to protect the IP rights of the design. This agreement was completed in April 2018 and allows INIA, APHA and PIWET to order the non-commercial custom made SSI PanVirus microarray v2 design without any knowledge of the probe sequences.

All Standard operating procedures (S.O.Ps), working S.O.Ps, microarray files for scanning and data subtraction has been distributed to INIA, APHA and PIWET.

Implementation of the microarray technology

MWR (SSI) has visited the three Institutes and implemented the PanVirus microarray technology. (INIA; 15th to 25th of April, PIWET; 10th to 20th of June, APHA; 25th to 26th of June). Training in sample preparation, microarray technology and data-analysis has been performed at each Institute (See Figure 1). The visit at APHA was shorter because APHA already knew the microarray technology and did not need training. Only data analysis and sample preparation was discussed at APHA.

SSI has sent 12 virus positive samples (purified or non-purified inactivated samples) to INIA, PIWET and APHA for ring testing. During the training of the microarray these samples were used as positive controls. So far INIA has tested 4/12, PIWET 4/12 and APHA 0/12.

INIA and PIWET has to practice performing the microarray experiments and when all 12 virus positive samples are tested, they are ready for testing samples with unknown virus content. APHA are ready for testing and they will compare their virus microarray and S.O.P with the PanVirus microarray v2 and the S.O.P from SSI.



Figure 1 : A) Training in sample preparation and microarray technology at INIA. B) Training in microarray data analysis at INIA. C) Training in sample preparation, microarray technology and data analysis at PIWET.