A detection method for infectious pancreatic necrosis virus (IPNV) based on reverse transcription (RT)?polymerase chain reaction (PCR)

LOPEZ?LASTRA,

GONZALEZ,

JASHES,

SANDINO,

Abstract. A rapid, sensitive and highly specific detection method for infectious pancreatic neerosis virus (IPNV), based on reverse transcription (RT) polymerase chain reaction (PCR) has been developed. The specificity of the assay is provided by the oligonucleotide primers selected from the IPNV major capsid polypeptide VP2 gene. For each primer combination only one major product is obtained when amplifieation is performed using IPNV double?stranded RNA from two different viral strains, Sp and VR?299, as the initial template. No products were detected when genomie nueleic acids other than IPNV RNA were used as RT?PCR templates. The specificity of the amplification products were confirmed by Southern hybridization using a specific cDNA probe. To assess the sensitivity of the method, dilutions of purified IPNV dsRNA total genome were amplified and quantities of as little as 1 pg of purified dsRNA were detected when the amplification product was visualized by silver?stained polyacrylamid