

Aubrey Moore, University of Guam College of Natural and Applied Sciences

ITEM	APHIS FUNDS
PERSONNEL:	
insect pathologist post-doc (Dr. Jim Grasela) (1 FTE @ 60K)	\$60,000
graduate Assistant (1 FTE @ \$35K)	\$35,000
insect rearing technicians (1 FTE @\$30K; may be used to hire multiple student research assistants)	\$30,000
survey technician (1 FTE @\$30K; may be used to hire multiple student research assistants)	\$30,000
Salary reimbursement for PI (Aubrey Moore; 10% FTE @ \$110k)	\$11,000
Subtotal	\$166,000
FRINGE BENEFITS:	
27% * salary for all above, except salary reimbursement for Moore	\$41,850
Subtotal	\$41,850
TRAVEL:	
Travel to enable participation for PI and post-doc to meetwith collaborators and to participate in a national or international meeting.	\$6,000
Subtotal	\$6,000
EQUIPMENT	
Insect rearing chamber	\$20,000
Eppendorf 5418 R Refrigerated Microcentrifuge	\$6,699
Subtotal	\$26,699
SUPPLIES	
Horizontal gel electrophoresis apparatus	\$732
Gel electrophoresis power supply	\$1,962
UVP Benchtop Transilluminator 110 v	\$1,410
Molecular biology supplies (i.e. DNA extraction kits, virus isolation kits, PCR)	\$2,463
Chemicals and reagents	\$2,500
media for rearing beetles	\$2,000
Vehicle fuel and maintenance	\$5,000
Computers and computer supplies	\$5,000
Cloud computing. Training a CRB damage detector using deep learning requires use of a computer with specialized software (TensorFlow) and specialized hardware (a graphics processing unit (GPU)). Instead of purchasing a physical machine we will rent a virtual machine designed specifically for this application from Amazon web services. We expect to run this machine for a total of 30 days. Estimated cost is \$648 (30 d x 24 h x \$0.90 per h)	\$648
Subtotal	\$21,715
CONTRACTUAL	
Contract with AgResearch New Zealand. Grant funding will be used to support an existing collaboration with Dr. Sean Marshall and Dr. Trevor Jackson who are recognized as global experts on biological control of CRB using OrNV. AgResearch New Zealand will provide molecular diagnostics for genotyping specimens of CRB and samples of OrNV. AgResearch maintains a collection of OrNV isolates in insect cell culture and has the facilities to mass produce virus <i>in vitro</i> once we have identified promising candidates for CRB-G biocontrol agents.	\$35,000
Cell Phone Contract with Docomo Pacific. We rent a cell phone with unlimited data to be used as a dedicated device for CRB surveys. We commonly use the EpiCollect app for these surveys. This cell phone also doubles as a safety device for technicians working alone in remote locations.	\$1,000
Subtotal	\$36,000
TOTAL DIRECT COSTS	\$298,264

INDIRECT COSTS (not to exceed 15%)	
INDIRECT COSTS Administrative fee (10% of total grant charged by Research Corporation of the University of Guam)	\$33,140
TOTAL	\$331,404