



Speaker Won Pat <speaker@judiwonpat.com>

# Messages and Communications Resending: Notice of Grant Application - Department of Agriculture

1 message

**Speaker Won Pat** <speaker@judiwonpat.com>  
To: Guam Legislature Clerks Office <clerks@guamlegislature.org>

Tue, Aug 27, 2013 at 9:04 AM

8/27/2013 8/26/2013

GUAM STATE CLEARINGHOUSE

Department of Agriculture Center federal grant application submitted for area wide review

32-13-715

2013 AUG 27 AM 9:22  
RFB

----- Forwarded message -----

From: **Roe-Ann Cruz** <roeann.cruz@guam.gov>  
Date: Mon, Aug 26, 2013 at 4:43 PM  
Subject: Resending: Notice of Grant Application - Department of Agriculture  
To: Speaker Won Pat <speaker@judiwonpat.com>

Please find Notice to Speaker attached here.

**ROE-ANN M. CRUZ**  
Grant Specialist · Guam State Clearinghouse  
OFFICE OF THE LIEUTENANT GOVERNOR  
P.O.Box 2950 Hagåtña, Guam 96932  
W. (671) 475-9384  
F. (671) 472-2007

*Please consider the environment before printing this email.*

32-13-715  
Office of the Speaker  
P.O. Box 2950  
Date: 8/27/13  
By: [Signature]  
Received by: [Signature]

On Mon, Aug 26, 2013 at 4:40 PM, Roe-Ann Cruz <roeann.cruz@guam.gov> wrote:

*Hafa Adai,*

Please see attached grant application as submitted by the Department of Agriculture, Agricultural Services Department.

Kind Regards,  
Roe-Ann

**ROE-ANN M. CRUZ**  
Grant Specialist · Guam State Clearinghouse  
OFFICE OF THE LIEUTENANT GOVERNOR  
P.O.Box 2950 Hagåtña, Guam 96932  
W. (671) 475-9384  
F. (671) 472-2007

*Please consider the environment before printing this email.*



## GUAM STATE CLEARINGHOUSE

P.O. Box 2950 Hagåtña, Guam 96932

Tel: (671) 475-9380

Website: [www.gsc.guam.gov](http://www.gsc.guam.gov)

Email: [clearinghouse@guam.gov](mailto:clearinghouse@guam.gov)

EDDIE BAZA CALVO

*Acting Administrator*

August 26, 2013

**Honorable Judith T. Won Pat, Ed.D.**

Speaker

*I Mina'Trentai Unu Na Liheslaturan Guåhan*

155 Hesler Place

Hagåtña, Guåhan 96910

**Ref:** Department of Agriculture Center federal grant application submitted for area wide review

*Hafa Adai* Speaker Won Pat:

This communication is to respectfully notify you the Guam State Clearinghouse (GSC) has received a federal grant application from the *Department of Agriculture*. The GSC has accepted the application, assigned State Application Identifier (SAI) number 16008131068N, and has initiated the process for area wide review. Information on the application is provided below:

**CFDA Number:** 10.170

**Grantor:** U.S. Department of Agriculture, Agricultural Marketing Services

**Grant Title:** Specialty Crop Block Grant Program – Farm Bill

**Details:** Funds from this grant will allow for the study of clean planting stock, obtain disease-free, certified orchid material and propagation of materials via tissue-culture. This clean planting stock of orchid will be made available to growers in order to enhance their competitiveness in the market.

**Start Date:** 09/30/2013

**End Date:** 09/29/2016

**Federal Amount:** \$173,488.79

Deadline for comments is **September 12, 2013** and can be sent via email to [clearinghouse@guam.gov](mailto:clearinghouse@guam.gov). This is in an effort to reduce costs associated with the review process while maintaining efficiency. This notice is sent to you as part of the area wide review of this application and may be referred to the appropriate overseeing committee of *I Liheslaturan Guåhan*. The GSC point of contact designated for this application is Roe-Ann M. Cruz and can be contacted via e-mail at [roeann.cruz@guam.gov](mailto:roeann.cruz@guam.gov). Please convey any instruction to GSC that may be incorporated in the review of this application.

*Dangkolo Na Si Yu'os Ma'åse',*

**Roe-Ann M. Cruz**

Acting Administrator

CC: File



**Department of Agriculture  
Dipattamenton Agrikottura**

163 Dairy Road, Mangilao, Guam 96913



**Eddie J.B. Calvo**  
Governor

**Ray Tenorio**  
Lt. Governor

Director's Office  
Agricultural Dev. Services  
Animal Health  
Aquatic & Wildlife Resources  
Forestry & Soil Resources  
Plant Nursery  
Plant Protection & Quarantine

300-7966/64; Fax 734-6569  
300-7973/300-7967  
300-7965  
735-3955/56; Fax 734-6570  
300-7976; Fax 300-3201  
300-7974  
475-1426/27; Fax 477-9487

**Mariquita F. Taitague**  
Director

**Manuel P. Duenas, II**  
Deputy Director

**July 03, 2013**

**MEMORANDUM**

**TO:** Honorable Edward J.B. Calvo, Governor of Guam  
**Via:** Executive Director, Guam State Clearinghouse  
**FROM:** Director, Department of Agriculture  
**SUBJECT:** Concurrent Review Request

The Department is submitting for review the In Vitro Propagation of *Dendrobium* and *Phalalenopsis* for Guam's local production project grant application documents with USDA, Agricultural Marketing Service (AMS), Specialty Crop Block Grant Program – Fram Bill (SCBGP-FB) in the amount of \$173,488.79 in federal funds.

This grant will allow for the study of clean planting stock, obtain disease-free, certified orchid material and propagation of materials via tissue-culture. Clean planting stock of orchid will be made available to growers in order to enhance their competitiveness.

  
MARIQUITA F. TAITAGUE

Attachment

### Application for Federal Assistance SF-424

<b>* 1. Type of Submission:</b> <input type="checkbox"/> Preapplication <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application	<b>* 2. Type of Application:</b> <input type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision	<b>* If Revision, select appropriate letter(s):</b> <input type="text"/> <b>* Other (Specify)</b> <input type="text"/>
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<b>* 3. Date Received:</b> <input type="text"/>	<b>4. Applicant Identifier:</b> <input type="text"/>
--	---

<b>5a. Federal Entity Identifier:</b> <input type="text"/>	<b>* 5b. Federal Award Identifier:</b> <input type="text"/>
---	--

**State Use Only:**

<b>6. Date Received by State:</b> <input type="text"/>	<b>7. State Application Identifier:</b> 16008131069N
--	--

**8. APPLICANT INFORMATION:**

<b>* a. Legal Name:</b> Guam Department of Agriculture
--

<b>* b. Employer/Taxpayer Identification Number (EIN/TIN):</b> 980018947	<b>* c. Organizational DUNS:</b> 778904292
---	---

**d. Address:**

<b>* Street1:</b> 163 Dairy Road
<b>Street2:</b> <input type="text"/>
<b>* City:</b> Mangilao
<b>County:</b> <input type="text"/>
<b>* State:</b> GUAM
<b>Province:</b> <input type="text"/>
<b>* Country:</b> USA: UNITED STATES
<b>* Zip / Postal Code:</b> 96913

**e. Organizational Unit:**

<b>Department Name:</b> Guam Department of Agriculture	<b>Division Name:</b> Agricultural Development Services
--	---

**f. Name and contact information of person to be contacted on matters involving this application:**

<b>Prefix:</b> Ms. Dr.	<b>* First Name:</b> Alicja
<b>Middle Name:</b> <input type="text"/>	
<b>* Last Name:</b> Weicko	
<b>Suffix:</b> M.S.	

<b>Title:</b> Research Associate III
--------------------------------------

<b>Organizational Affiliation:</b> University of Guam
---

<b>* Telephone Number:</b> 671-735-2140	<b>Fax Number:</b> 671-734-4600
---	---------------------------------

<b>* Email:</b> awiecko@guam.uog.edu.
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**Application for Federal Assistance SF-424**

**9. Type of Applicant 1: Select Applicant Type:**

F. U.S. Territory or Possession

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

\* Other (specify):

**\* 10. Name of Federal Agency:**

AMS-USDA

**11. Catalog of Federal Domestic Assistance Number:**

10.170

CFDA Title:

SCBGP-FB

**\* 12. Funding Opportunity Number:**

AMS-FV-13-0002

\* Title:

Specialty Crop Block Grant Program - Farm Bill

**13. Competition Identification Number:**

Title:

**14. Areas Affected by Project (Cities, Counties, States, etc.):**

.GUAM

**\* 15. Descriptive Title of Applicant's Project:**

In Vitro Propagation of Dendrobium and Phalaenopsis for Guam's Local Production

Attach supporting documents as specified in agency instructions.



**Application for Federal Assistance SF-424**

**16. Congressional Districts Of:**

\* a. Applicant

\* b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

**17. Proposed Project:**

\* a. Start Date:

\* b. End Date:

**18. Estimated Funding (\$):**

\* a. Federal \$173,488.79

\* b. Applicant

\* c. State

\* d. Local

\* e. Other

\* f. Program Income

\* g. TOTAL \$173,488.79

**\* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

a. This application was made available to the State under the Executive Order 12372 Process for review on

b. Program is subject to E.O. 12372 but has not been selected by the State for review.

c. Program is not covered by E.O. 12372.

**\* 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes", provide explanation.) Applicant Federal Debt Delinquency Explanation**

Yes  No

**21. \*By signing this application, I certify (1) to the statements contained in the list of certifications\*\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\*\* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

\*\* I AGREE

\*\* The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

**Authorized Representative:**

Prefix:  \* First Name:

Middle Name:

\* Last Name:

Suffix:

\* Title:

\* Telephone Number:  Fax Number:

\* Email:

\* Signature of Authorized Representative:  \* Date Signed:

**Application for Federal Assistance SF-424**

**\* Applicant Federal Debt Delinquency Explanation**

The following field should contain an explanation if the Applicant organization is delinquent on any Federal Debt. Maximum number of characters that can be entered is 4,000. Try and avoid extra spaces and carriage returns to maximize the availability of space.

[Empty text input area for Applicant Federal Debt Delinquency Explanation]

Item:	Entry:
1.	<p><b>Type of Submission: (Required):</b> Select one type of submission in accordance with agency instructions.</p> <ul style="list-style-type: none"> <li>• Pre-application</li> <li>• Application</li> <li>• Changed/Corrected Application – If requested by the agency, check if this submission is to change or correct a previously submitted application. Unless requested by the agency, applicants may not use this to submit changes after the closing date.</li> </ul>
2.	<p><b>Type of Application: (Required)</b> Select one type of application in accordance with agency instructions.</p> <ul style="list-style-type: none"> <li>• New – An application that is being submitted to an agency for the first time.</li> <li>• Continuation -An extension for an additional funding/budget period for a project with a projected completion date. This can include renewals.</li> <li>• Revision -Any change in the Federal Government’s financial obligation or contingent liability from an existing obligation. If a revision, enter the appropriate letter(s). More than one may be selected. If "Other" is selected, please specify in text box provided.</li> </ul> <p style="margin-left: 40px;">A. Increase Award B. Decrease Award C. Increase Duration D. Decrease Duration E. Other (specify)</p>
3.	<p><b>Date Received:</b> Leave this field blank. This date will be assigned by the Federal agency.</p>
4.	<p><b>Applicant Identifier:</b> Enter the entity identifier assigned buy the Federal agency, if any, or the applicant’s control number if applicable.</p>
5a.	<p><b>Federal Entity Identifier:</b> Enter the number assigned to your organization by the Federal Agency, if any.</p>
5b.	<p><b>Federal Award Identifier:</b> For new applications leave blank. For a continuation or revision to an existing award, enter the previously assigned Federal award identifier number. If a changed/corrected application, enter the Federal Identifier in accordance with agency instructions.</p>
6.	<p><b>Date Received by State:</b> Leave this field blank. This date will be assigned by the State, if applicable.</p>
7.	<p><b>State Application Identifier:</b> Leave this field blank. This identifier will be assigned by the State, if applicable.</p>
8.	<p><b>Applicant Information:</b> Enter the following in accordance with agency instructions:</p> <ol style="list-style-type: none"> <li>a. <b>Legal Name: (Required):</b> Enter the legal name of applicant that will undertake the assistance activity. This is that the organization has registered with the Central Contractor Registry. Information on registering with CCR may be obtained by visiting the <a href="http://Grants.gov">Grants.gov</a> website.</li> <li>b. <b>Employer/Taxpayer Number (EIN/TIN): (Required):</b> Enter the Employer or Taxpayer Identification Number (EIN or TIN) as assigned by the Internal Revenue Service. If your</li> </ol>



	<p>organization is not in the US, enter 44-4444444.</p> <p>c. <b>Organizational DUNS:</b> (Required) Enter the organization's DUNS or DUNS+4 number received from Dun and Bradstreet. Information on obtaining a DUNS number may be obtained by visiting the Grants.gov website.</p> <p>d. <b>Address:</b> Enter the complete address as follows: Street address (Line 1 required), City (Required), County, State (Required, if country is US), Province, Country (Required), Zip/Postal Code (Required, if country is US).</p> <p>e. <b>Organizational Unit:</b> Enter the name of the primary organizational unit (and department or division, (if applicable) that will undertake the assistance activity, if applicable.</p> <p>f. <b>Name and contact information of person to be contacted on matters involving this applicant required),</b> organizational affiliation (if affiliated with an organization other on: Enter the name (First and last name than the applicant organization), telephone number (Required), fax number, and email address (Required) of the person to contact on matters related to this application.</p>
9.	<p><b>Type of Applicant:</b> (Required) Select up to three applicant type(s) in accordance with agency instructions.</p> <ul style="list-style-type: none"> <li>A. State Government</li> <li>B. County Government</li> <li>C. City or Township Government</li> <li>D. Special District Government</li> <li>E. Regional Organization</li> <li>F. U.S. Territory or Possession</li> <li>G. Independent School District</li> <li>H. Public/State Controlled Institution of Higher Education</li> <li>I. Indian/Native American Tribal Government (Federally Recognized)</li> <li>J. Indian/Native American Tribal Government (Other than Federally Recognized)</li> <li>K. Indian/Native American Tribally Designated Organization</li> <li>L. Public/Indian Housing Authority</li> <li>M. Nonprofit</li> <li>N. Nonprofit</li> <li>O. Private Institution of Higher Education</li> <li>P. Individual</li> <li>Q. For-Profit Organization (Other than Small Business)</li> <li>R. Small Business</li> <li>S. Hispanic-serving Institution</li> <li>T. Historically Black Colleges and Universities (HBCUs)</li> <li>U. Tribally Controlled Colleges and Universities (TCCUs)</li> <li>V. Alaska Native and Native Hawaiian Serving Institutions</li> <li>W. Non-domestic (non-US) Entity</li> <li>X. Other (specify)</li> </ul>
10.	<p><b>Name Of Federal Agency:</b> (Required) Enter the name of the Federal agency from which assistance is being requested with this application.</p>
11.	<p><b>Catalog Of Federal Domestic Assistance Number/Title:</b> Enter the Catalog of Federal Domestic Assistance number and title of the program under which assistance is requested, as found in the program announcement, if applicable.</p>
12.	<p><b>Funding Opportunity Number/Title:</b> (Required) Enter the Funding Opportunity Number and</p>

	title of the opportunity under which assistance is requested, as found in the program announcement.
13.	<b>Competition Identification Number/Title:</b> Enter the Competition Identification Number and title of the competition under which assistance is requested, if applicable. C. Increase Duration D. Decrease Duration E. Other (specify)
14.	<b>Areas Affected By Project:</b> List the areas or entities using the categories (e.g., cities, counties, states, etc.) specified in agency instructions. Use the continuation sheet to enter additional areas, if needed.
15.	<b>Descriptive Title of Applicant's Project:</b> (Required) Enter a brief descriptive title of the project. If appropriate, attach a map showing project location (e.g., construction or real property projects). For pre-applications, attach a summary description of the project.
16.	<b>Congressional Districts Of:</b> (Required) 16a. Enter the applicant's Congressional District, and 16b. Enter all District(s) affected by the program or project. Enter in the format: 2 characters State Abbreviation – 3 characters District Number, e.g., CA-005 for California 5th district, CA012 for California 12th district, NC-103 for North Carolina's 103rd district. • If all congressional districts in a state are affected, enter "all" for the district number, e.g., MD-all for all congressional districts in Maryland. • If nationwide, i.e. all districts within all states are affected, enter US-all. • If the program/project is outside the US, enter 00-000.
17.	<b>Proposed Project Start and End Dates:</b> (Required) Enter the proposed start date and end date of the project.
18.	<b>Estimated Funding:</b> (Required) Enter the amount requested or to be contributed during the first funding/budget period by each contributor. Value of in-kind contributions should be included on appropriate lines, as applicable. If the action will result in a dollar change to an existing award, indicate only the amount of the change. For decreases, enclose the amounts in parentheses.
19.	<b>Is Application Subject to Review by State Under Executive Order 12372 Process?</b> Applicants should contact the State Single Point of Contact (SPOC) for Federal Executive Order 12372 to determine whether the application is subject to the State intergovernmental review process. Select the appropriate box. If "a." is selected, enter the date the application was submitted to the State.
20.	<b>Is the Applicant Delinquent on any Federal Debt?</b> (Required) Select the appropriate box. This question applies to the applicant organization, not the person who signs as the authorized representative. Categories of debt include: But may not be limited to; delinquent audit disallowances, loans and taxes. If yes, include an explanation in an attachment.
21.	<b>Authorized Representative:</b> (Required) To be signed and dated by the authorized representative of the applicant organization. Enter the name (First and last name required) title (Required), telephone number (Required), fax number, and email address (Required) of the person authorized to sign for the applicant. A copy of the governing body's authorization for you to sign this application as the official representative must be on file in the applicant's office. (Certain Federal agencies may require that this authorization be submitted as part of the application.)

**BUDGET INFORMATION - Non-Construction Programs**

**SECTION A - BUDGET SUMMARY**

Grant Program Function or Activity	Catalog of Federal Domestic Assistance Number	Estimated Unobligated Funds		New or Revised Budget	
		Federal	Non-Federal	Federal	Non-Federal
1.		\$	\$	\$	\$
2.					
3.					
4.					
5.	Totals	\$	\$	\$	\$
		173,488.79	173,488.79	173,488.79	173,488.79

**SECTION B - BUDGET CATEGORIES**

6. Object Class Categories	(1)	GRANT PROGRAM, FUNCTION OR ACTIVITY		(5) Total
		(2)	(3)	
a. Personnel	\$	\$	\$	\$
b. Fringe Benefits	16,952.00			16,952.00
c. Travel	6,800.00			6,800.00
d. Equipment				
e. Supplies	19,627.79			19,627.79
f. Contractual	28,000.00			28,000.00
g. Construction				
h. Other				
i. Total Direct Charges (sum of 6a-h)				
j. Indirect Charges	17,349.00			17,349.00
k. TOTALS (sum of 6i and 6j)	\$	\$	\$	\$
	173,488.79			173,488.79
7. Program Income	\$	\$	\$	\$

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**SECTION C - NON-FEDERAL RESOURCES**

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8.	\$	\$	\$	\$
9.				
10.				
11.				
12. TOTAL (sum of lines 8-11)	\$	\$	\$	\$

**SECTION D - FORECASTED CASH NEEDS**

13. Federal	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
\$ 9,000.00	\$ 9,000.00	\$	\$ 3,000.00	\$ 3,000.00	\$ 6,000.00
14. Non-Federal					
15. TOTAL (sum of lines 13 and 14)	\$ 9,000.00	\$	\$ 3,000.00	\$ 3,000.00	\$ 6,000.00

**SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT**

(a) Grant Program	FUTURE FUNDING PERIODS (Years)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16.	\$ 51,621.79	\$ 54,736.00	\$ 67,131.00	\$
17.				
18.				
19.				
20. TOTAL (sum of lines 16-19)	\$	\$	\$	\$

**SECTION F - OTHER BUDGET INFORMATION**

21. Direct Charges:	22. Indirect Charges:
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23. Remarks:

**ASSURANCES - NON-CONSTRUCTION PROGRAMS**

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.


**PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.**

**NOTE:** Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL 	TITLE Director
APPLICANT ORGANIZATION Guam Department of Agriculture	DATE SUBMITTED 7/1/13





## Grant Application Package

Opportunity Title:	Specialty Crop Block Grant Program-Farm Bill
Offering Agency:	Agricultural Marketing Service
CFDA Number:	10.170
CFDA Description:	Specialty Crop Block Grant Program - Farm Bill
Opportunity Number:	AMS-FV-2013
Competition ID:	
Opportunity Open Date:	05/09/2013
Opportunity Close Date:	07/10/2013
Agency Contact:	Trista Etzig Project Manager E-mail: trista.etzig@usda.gov Phone: 202-690-4942

This opportunity is only open to organizations, applicants who are submitting grant applications on behalf of a company, state, local or tribal government, academia, or other type of organization.

Application Filing Name:

### Select Forms to Complete

#### Mandatory

Application for Federal Assistance (SF-424)	Complete
Attachments	Complete
Budget Information for Non-Construction Programs (SF-424A)	Complete
Assurances for Non-Construction Programs (SF-424B)	Complete

#### Optional

### Instructions

[Show Instructions >>](#)

This electronic grants application is intended to be used to apply for the specific Federal funding opportunity referenced here. If the Federal funding opportunity listed is not the opportunity for which you want to apply, close this application package by clicking on the "Cancel" button at the top of this screen. You will then need to locate the correct Federal funding opportunity, download its application and then apply.

**Application for Federal Assistance SF-424**

<b>* 1. Type of Submission:</b> <input type="checkbox"/> Preapplication <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application	<b>* 2. Type of Application:</b> <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision	<b>* If Revision, select appropriate letter(s):</b> _____ <b>* Other (Specify):</b> _____
---	---	--

<b>* 3. Date Received:</b> 07/08/2013	<b>4. Applicant Identifier:</b> _____
--	--

<b>5a. Federal Entity Identifier:</b> _____	<b>5b. Federal Award Identifier:</b> _____
--	---

**State Use Only:**

<b>6. Date Received by State:</b> _____	<b>7. State Application Identifier:</b> _____
---	---

**8. APPLICANT INFORMATION:**

<b>* a. Legal Name:</b> Guam Department of Agriculture	
<b>* b. Employer/Taxpayer Identification Number (EIN/TIN):</b> 980018947	<b>* c. Organizational DUNS:</b> 7789042920000

**d. Address:**

<b>* Street1:</b>	163 Dairy Road
<b>Street2:</b>	_____
<b>* City:</b>	Mangilao
<b>County/Parish:</b>	_____
<b>* State:</b>	GU: Guam
<b>Province:</b>	_____
<b>* Country:</b>	USA: UNITED STATES
<b>* Zip / Postal Code:</b>	96913-0000

**e. Organizational Unit:**

<b>Department Name:</b> Guam Department of Agriculture	<b>Division Name:</b> Agricultural Development Svcs.
---	---

**f. Name and contact information of person to be contacted on matters involving this application:**

<b>Prefix:</b> Dr.	<b>* First Name:</b> Alicia
<b>Middle Name:</b>	_____
<b>* Last Name:</b> Wiecko	_____
<b>Suffix:</b> M.S.	_____
<b>Title:</b>	Research Associate III
<b>Organizational Affiliation:</b>	University of Guam
<b>* Telephone Number:</b> 671-735-2140	<b>Fax Number:</b> 671-734-4600
<b>* Email:</b>	awiecko@uguan.uog.edu

**Application for Federal Assistance SF-424**

**\* 9. Type of Applicant 1: Select Applicant Type:**

F: U.S. Territory or Possession

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

\* Other (specify):

**\* 10. Name of Federal Agency:**

Agricultural Marketing Service

**11. Catalog of Federal Domestic Assistance Number:**

10.170

CFDA Title:

Specialty Crop Block Grant Program - Farm Bill

**\* 12. Funding Opportunity Number:**

AMS-FV-2013

\* Title:

Specialty Crop Block Grant Program-Farm Bill

**13. Competition Identification Number:**

Title:

**14. Areas Affected by Project (Cities, Counties, States, etc.):**



**\* 15. Descriptive Title of Applicant's Project:**

In Vitro Propagation of Dendrobium and Palalenopsis

Attach supporting documents as specified in agency instructions.



**Application for Federal Assistance SF-424**

**16. Congressional Districts Of:**

\* a. Applicant

b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

**17. Proposed Project:**

\* a. Start Date:

\* b. End Date:

**18. Estimated Funding (\$):**

* a. Federal	<input type="text" value="173,488.79"/>
* b. Applicant	<input type="text" value="0.00"/>
* c. State	<input type="text" value="0.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="173,488.79"/>

**\* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

- a. This application was made available to the State under the Executive Order 12372 Process for review on
- b. Program is subject to E.O. 12372 but has not been selected by the State for review.
- c. Program is not covered by E.O. 12372.

**\* 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

Yes  No

If "Yes", provide explanation and attach

**21. \*By signing this application, I certify (1) to the statements contained in the list of certifications\*\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\*\* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

\*\* I AGREE

\*\* The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

**Authorized Representative:**

Prefix:  \* First Name:   
Middle Name:   
\* Last Name:   
Suffix:

\* Title:

\* Telephone Number:  Fax Number:

\* Email:

\* Signature of Authorized Representative:  \* Date Signed:

## ATTACHMENTS FORM

**Instructions:** On this form, you will attach the various files that make up your grant application. Please consult with the appropriate Agency Guidelines for more information about each needed file. Please remember that any files you attach must be in the document format and named as specified in the Guidelines.

**Important:** Please attach your files in the proper sequence. See the appropriate Agency Guidelines for details.

1) Please attach Attachment 1	ORCHIDS_052413_FINAL.pdf	Add Attachment	Delete Attachment	View Attachment
2) Please attach Attachment 2		Add Attachment	Delete Attachment	View Attachment
3) Please attach Attachment 3		Add Attachment	Delete Attachment	View Attachment
4) Please attach Attachment 4		Add Attachment	Delete Attachment	View Attachment
5) Please attach Attachment 5		Add Attachment	Delete Attachment	View Attachment
6) Please attach Attachment 6		Add Attachment	Delete Attachment	View Attachment
7) Please attach Attachment 7		Add Attachment	Delete Attachment	View Attachment
8) Please attach Attachment 8		Add Attachment	Delete Attachment	View Attachment
9) Please attach Attachment 9		Add Attachment	Delete Attachment	View Attachment
10) Please attach Attachment 10		Add Attachment	Delete Attachment	View Attachment
11) Please attach Attachment 11		Add Attachment	Delete Attachment	View Attachment
12) Please attach Attachment 12		Add Attachment	Delete Attachment	View Attachment
13) Please attach Attachment 13		Add Attachment	Delete Attachment	View Attachment
14) Please attach Attachment 14		Add Attachment	Delete Attachment	View Attachment
15) Please attach Attachment 15		Add Attachment	Delete Attachment	View Attachment

BUDGET INFORMATION - Non-Construction Programs

OMB Number: 4040-0006  
Expiration Date: 06/30/2014

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Research and Execution	10.170	\$ 173,488.79	\$ 0.00	\$ 0.00	\$ 0.00	\$ 173,488.79
2. n/a	n/a	0.00	0.00	0.00	0.00	0.00
3. n/a	n/a	0.00	0.00	0.00	0.00	0.00
4. n/a	n/a	0.00	0.00	0.00	0.00	0.00
5. Totals		\$ 173,488.79	\$ 0.00	\$ 0.00	\$ 0.00	\$ 173,488.79



**SECTION B - BUDGET CATEGORIES**

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total (5)
	(1) Research and Execution	(2) n/a	(3) n/a	(4) n/a	
a. Personnel	\$ 84,760.00	\$	\$	\$	\$ 84,760.00
b. Fringe Benefits	16,952.00				16,952.00
c. Travel	6,800.00				6,800.00
d. Equipment	0.00				
e. Supplies	19,627.79				19,627.79
f. Contractual	28,000.00				28,000.00
g. Construction	0.00				
h. Other	0.00				
i. Total Direct Charges (sum of 6a-6h)	156,139.79				\$ 156,139.79
j. Indirect Charges	17,349.00				\$ 17,349.00
k. TOTALS (sum of 6i and 6j)	\$ 173,488.79	\$	\$	\$	\$ 173,488.79
7. Program Income	\$	\$	\$	\$	\$

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Standard Form 424A (Rev. 7-97)  
Prescribed by OMB (Circular A -102) Page 1A

SECTION C - NON-FEDERAL RESOURCES					
(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS	
8. n/a	\$	\$	\$	\$	
9. n/a					
10. n/a					
11. n/a					
<b>12. TOTAL (sum of lines 8-11)</b>	\$	\$	\$	\$	
SECTION D - FORECASTED CASH NEEDS					
	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	\$ 9,000.00	\$	\$ 3,000.00	\$	\$ 6,000.00
14. Non-Federal	\$				
<b>15. TOTAL (sum of lines 13 and 14)</b>	\$ 9,000.00	\$	\$ 3,000.00	\$	\$ 6,000.00
SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT					
(a) Grant Program	FUTURE FUNDING PERIODS (YEARS)				
	(b) First	(c) Second	(d) Third	(e) Fourth	
16. Research and Execution	\$ 51,621.79	\$ 54,736.00	\$ 67,131.00	\$	
17. n/a					
18. n/a					
19. n/a					
<b>20. TOTAL (sum of lines 16 - 19)</b>	\$ 51,621.79	\$ 54,736.00	\$ 67,131.00	\$	
SECTION F - OTHER BUDGET INFORMATION					
21. Direct Charges:		22. Indirect Charges:			
23. Remarks:					

### ASSURANCES - NON-CONSTRUCTION PROGRAMS

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0040), Washington, DC 20503.

**PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.**

**NOTE:** Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project cost) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, through any authorized representative, access to and the right to examine all records, books, papers, or documents related to the award; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
4. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
5. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
6. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
7. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
8. Will comply, as applicable, with provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).
14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.
15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.
16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.
19. Will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. 7104) which prohibits grant award recipients or a sub-recipient from (1) Engaging in severe forms of trafficking in persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or subawards under the award.

<p>* SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL</p> <p>Roe-Ann Jean Cruz</p>	<p>* TITLE</p> <p>Director</p>
<p>* APPLICANT ORGANIZATION</p> <p>Guam Department of Agriculture</p>	<p>* DATE SUBMITTED</p> <p>07/08/2013</p>



[Home](#) > [Apply for Grants](#) > Confirmation

## Confirmation

Thank you for submitting your grant application package via Grants.gov. Your application is currently being processed by the Grants.gov system. Once your submission has been processed, Grants.gov will send email messages to advise you of the progress of your application through the system. Over the next 24 to 48 hours, you should receive two emails. The first will confirm receipt of your application by the Grants.gov system, and the second will indicate that the application has either been successfully validated by the system prior to transmission to the grantor agency or has been rejected due to errors.

Please do not hit the back button on your browser.

If your application is successfully validated and subsequently retrieved by the grantor agency from the Grants.gov system, you will receive an additional email. This email may be delivered several days or weeks from the date of submission, depending on when the grantor agency retrieves it.

You may also monitor the processing status of your submission within the Grants.gov system by clicking on the "Track My Application" link listed at the end of this form.

Note: Once the grantor agency has retrieved your application from Grants.gov, you will need to contact them directly for any subsequent status updates. Grants.gov does not participate in making any award decisions.

**IMPORTANT NOTICE:** If you do not receive a receipt confirmation and either a validation confirmation or a rejection email message within 48 hours, please contact us. The Grants.gov Contact Center can be reached by email at [support@grants.gov](mailto:support@grants.gov), or by telephone at 1-800-518-4726. Always include your Grants.gov tracking number in all correspondence. The tracking numbers issued by Grants.gov look like GRANTXXXXXXXXXX.

If you have questions please contact the Grants.gov Contact Center: [support@grants.gov](mailto:support@grants.gov)  
1-800-518-4726 24 hours a day, 7 days a week. Closed on federal holidays.

The following application tracking information was generated by the system:

<b>Grants.gov Tracking Number:</b>	GRANT11446475
<b>Applicant DUNS:</b>	77-890-4292
<b>Submitter's Name:</b>	Roe-Ann Jean M Cruz
<b>CFDA Number:</b>	10.170
<b>CFDA Description:</b>	Specialty Crop Block Grant Program - Farm Bill
<b>Funding Opportunity Number:</b>	AMS-FV-2013
<b>Funding Opportunity Description:</b>	Specialty Crop Block Grant Program-Farm Bill
<b>Agency Name:</b>	Agricultural Marketing Service
<b>Application Name of this Submission:</b>	FY13 Guam Department of Agriculture SCBGP-FB
<b>Date/Time of Receipt:</b>	2013.07.08 12:48 AM, EDT

TRACK MY APPLICATION – To check the status of this application, please click the link below:  
[https://apply07.grants.gov/apply/checkSingleApplStatus.faces?tracking\\_num=GRANT11446475](https://apply07.grants.gov/apply/checkSingleApplStatus.faces?tracking_num=GRANT11446475)

It is suggested you Save and/or Print this response for your records.



**In vitro propagation of *Dendrobium* and  
*Phalaenopsis* for Guam's local production**

**Guam Department of Agriculture  
Mangilao, Guam 96923**

**And**

**University of Guam  
College of Natural and Applied Sciences  
Mangilao, GU 96923**

**Proposed starting date: September 30, 2013**

**Duration: 3 Years**

**Proposed Budget Total: \$173,488.79**

### **State Department of Agriculture Oversight:**

Toward the end of each year, Guam Department of Agriculture will assess progress of this project.

**In vitro propagation of *Dendrobium* and *Phalaenopsis* for Guam's local production.**  
(A collaborative project between Guam Department of Agriculture and the University of Guam)

### **Abstract:**

Orchids represent the most highly developed family among monocotyledons with 600-800 genera and close to 35,000 species and Guam has a perfect climate to grow them. Abundance of orchids on Guam is also highly desired by 1.3 million Asian tourists per year who during their tropical vacation expect beautiful island vegetation that include colorful exotic flowers. We will develop considerable production of *Dendrobium* and *Phalaenopsis* orchids in tissue culture. We anticipate that at the end of this project local nurseries and general public be able to purchase inexpensive diseases free varieties in quantities of hundreds. In the same time Asian import will be reduced and partly replaced by local production. A few Guam residents (employed by the project) would develop skills of tissue culture propagation, which will make them competitive on a job market. Possibly acquired skills would allow them to start their own tissue culture labs or successful floriculture businesses.

### **Project Purpose:**

This project will address the development of orchid production on Guam. Orchids represent the most highly developed family among monocotyledons with 600-800 genera and close to 35,000 species. Their flowers present an incredible range of diversity in size, shape and color. They are known for their long lasting and very beautiful blossoms that ultimately result in high price on the international flower markets. Guam as a tropical island has a perfect climate to grow orchids. It is also a desirable destination for 1.3 million Asian tourists per year. Most tourists visiting Guam expect clean ocean as well beautiful tropical vegetation including colorful exotic flowers. About 90% of potted orchids on Guam are imported from other countries such as Thailand, Taiwan, the Philippine Islands, Hawaii and California. All cut flowers in the hotel's lobbies or restaurants are also imported from other countries. So far there is no commercial production of orchids or other ornamental flowers. In Hawaii where economy, just like on Guam, depends on tourist activity *Dendrobium* orchid industry is one of the fastest growing horticultural sectors. Strong market demand in recent years, especially for potted *Dendrobium* plants, has resulted in increased commercial activities and marketing. Statistics provided by Hawaii Department of Agriculture indicates an increase from orchid wholesale value of \$50,000 in 1969 to \$10 million in 1997. Guam has comparable opportunity to develop orchids businesses, which could support local nurseries and flower shops.

**Potential impact:**

Numerous nurseries and general public on Guam would be supplied with tissue culture orchids produced by proposed project. This will likely result in greater appreciation of floriculture in Guam's environment and give a chance to develop floriculture businesses for local growers. Hotels, stores, restaurants, private nurseries and Guam's residents will be able to purchase healthy orchids for low price. Disease free plants will have more appealing and longer lasting flowers. Visitors experiencing more island beauty would be more incline to come back.

**Expected measurable outcomes:**

Goal 1. Hundreds of orchids will become available for local growers.

Goal 2. Import of orchids from Asian countries will be reduced and replaced by local production.

Goal 3. Project employees (technicians) would develop skills of tissue culture propagation, which would make them more competitive on a job market.

Goal 4. For many Guam residents accomplishments of this project would create an opportunity to start their own businesses that would supply flowers to local hotels and florists.

**Performance Measure:**

Reports presenting progress will be submitted to Specialty Crop Block Grant Program.

**Benchmark:**

In the second year of this project 1000 plants in vitro will be transferred from in vitro to nursery.

**Target:**

2000 plants of *Dendrobium* and *Phalaenopsis* will become available for commercial nurseries. This number will grow in subsequent years when orchids in flasks will mature and will be out-planted to nursery.

**Work Plan:**

We intend to produce several most common varieties of certified, disease-free *Dendrobium* and *Phalaenopsis* and provide them at a low cost to local nurseries. We would propagate them in vitro in one of our two existing tissue culture labs then out-plant them to our nurseries before providing them to end-users. Among the reasons for limited

production of orchids is their health. In the last two decades Guam's quarantine detected an alarming amount of orchid diseases. Additionally, numerous plants exhibited symptoms of viral infections. Viral infections usually spread among orchid plants by mechanical means, either by direct contact, or by tools or hands. Viruses are also spread by means of vegetative propagation of infected plants. Facing the high likelihood that virus-infected orchids are being imported and retailed to local growers, in 2008 we carried a survey. The objective of survey was to determine whether CyMV and ORSV viruses were present on Guam and whether imported orchids were being brought already infected. A total of 67 orchid samples were collected from local growers. Majority, over 70%, tested positive. In samples of orchids being imported into Guam, out of 46 shipments, sixteen (34.8%) were virus-infected.

As indicated above for this project we have chosen two orchids genera: *Dendrobium* and *Phalaenopsis*. The reason for choosing *Dendrobium* is high popularity of this genus. Overall they are easy to grow and maintain and they produce many long lasting blooming stalks. It makes them perfect for decorations and cut flowers bouquets. *Dendrobium* can be propagated by cuttings, division and seeds. Seed propagation is by far the most effective but can be done only in tissue culture by experienced technician. Since we have needed facilities and expertise we will put most of our effort on this type of propagation.

The choice of *Phalaenopsis* is related to its popularity and unmatched elegance manifested by long, arching stem with abundance of flowers. *Phalaenopsis* is the most fashionable in luxury hotels, restaurants and other luxury businesses around the world. There are about 60 species and thousands of hybrids, ranging from classic white (often called a moth orchid) to jewel-like miniatures that bloom for several months. *Phalaenopsis* is perfect for Guam because it grows well in pots and bloom exceptionally well under artificial as well as natural light and temperatures ranging from 20 to 35 °C.

In our lab *Phalaenopsis* clones would be mostly obtained through in vitro node culture. This method gives far less plants than seed propagation (planned for *Dendrobium*) but since it is very difficult to grow *Phalaenopsis* from seeds, node culture will be used.

Initially, we will acquire orchids from local nurseries and after eliminating infected plants we will start propagation as soon as possible. Afterward when funds become available we would import disease free *Dendrobium* and *Phalaenopsis* from well known established laboratories in Asia and US. They will be further maintained in a nursery until blooming and producing capsules with seeds.

For *Dendrobium* we will use seeds and for *Phalaenopsis* we will use stalks for nodules propagation. More laboratory expertise needs to be acquired to perform these tasks successfully. Two weeks of training in Taiwan's leading plant tissue culture lab has been tentatively arranged. This training would be essential for successful completion of proposed project.

For successful completion of this project, major renovation of tissue culture laboratory would be necessary. Existing laboratory has serious problems caused by termites and mold. Renovated lab will be designated for orchids in vitro propagation and possibly

other ornamental plants in the future. For this project we also need to hire a technician with the tissue culture experience.

University of Guam employee, Ms. Alicja Wiecko, (M.S. in floriculture), will be in charge of this project. Alicja Wiecko has 25 years of tissue culture experience. She will obtain the disease free orchids material and maintain it for the duration of the project. UOG will provide training for GDA personnel. Furthermore, through UOG Ms. Wiecko will administer all financial aspects of this proposed project during its 3 years duration.

**Budget:**

During the first year we do not anticipate timely access to funding. Historically, it took about 6-10 months for GovGuam to sets accounts and secure full documentation for both University of Guam and Guam Department of Agriculture. Most likely in the second part of the first year, we will hire personnel using appropriated funds. Vital accomplishments in the first part of the first year will be secured from rollovers.

Year 1

Salaries:

Research Associate will spend 25% of time @ 10 hours per week, working on this project for 52 weeks. Hourly rate is \$19.00 (\$9,880.00) plus 20% fringe benefits (\$1,976.00), total: \$11,856.00

Contractual:

For successful completion of this project, major renovation of tissue culture laboratory would be necessary. Existing laboratory has serious problems caused by termites and mold. Renovated lab will be designated for orchids in vitro propagation. We will construct a modular unit with dividing walls, ceramic tiles, cabinets, air-conditioning, water purifying system. Total cost: \$28,000.00

Supplies:

The completion of this project will require the purchase 4 sets of ImmunoStrip Virus test kits at \$120.00 each. Total cost \$480.00

Project requires a purchase of 100 orchids plants from local nurseries. Estimated price for one orchid plant is \$20.00. Total cost \$2,000.00

Fertilizer: Total cost \$100.00

Nursery cage: Total cost \$3,000

Culture multiplication media, 50L container. Cost \$98.79

Orchids maintenance media, 50L container. Cost \$155.00

Charcoal, 1kg container. Cost \$56.00

Coconut powder, 1kg container. Cost \$93.00

Total for supplies: \$5,982.79

**Total amount requested for year 1: \$45,838.79**

## Year 2

### Salaries:

Research Associate will spend 50% of time @ 20 hours per week working on this project for 52 weeks. Hourly rate is \$20.00 (\$20,800.00) plus 20% fringe benefits (\$4,160.00), total: \$24,960.

Research Assistant will spend 50% of time @ 20 hours per week working on this project for 52 weeks. Hourly rate is \$10.00 (\$10,400.00) plus fringe benefits (\$2,080.00), total: \$12,480.00

Total salaries: \$37,440

### Supplies:

The completion of this project will require the purchase of 8 Immunostrip Virus test kits at \$120.00 each. Total cost \$960.00

Project requires a purchase of 200 orchids plants from local nurseries. Estimated price for one orchid plant is \$20.00. Total cost \$4,000

Orchids in vitro from overseas nurseries. Cost with shipment \$2,000

Fertilizer, Total cost \$250.00

Culture multiplication media, 50L container. Cost \$99.00

Orchids maintenance media, 50L container. Cost \$155.00

Charcoal, 1kg container. Cost \$56.00

Coconut powder, 1kg container. Cost \$93.00

Office supplies, including cartridges, paper, Internet service, cost \$500.00

Total supplies: \$8,113

Travel:

Principal Investigator will be trained in reputable tissue culture laboratories. Air transportation is approximately \$2,000.00, per diem for 6 days at 200.00/day is \$1,200.00, and other accidental expenses are \$200.00 Total amount requested for travel is \$3,400.00

**Total requested for Year 2: \$48,953**

### Year 3

Salaries:

Research Associate, will be hired full time, 40 hours per week for 52 weeks. Hourly rate is \$21.00 (\$43,680.00) plus 20% fringe benefits (\$8,736.00), total: \$52,416.00

Supplies:

The completion of this project will require a purchase of 4 ImmunoStrip Virus test kits, \$120.00 each. Total cost \$480.00

Project requires a purchase of 100 orchids plants from local nurseries. Estimated price for one orchid plant is \$20.00. Total cost \$2,000

Fertilizer, Total cost \$150.00

Orchids in vitro from out of the country nurseries. Cost with shipment \$1,000

Culture multiplication media, 50L container. Cost \$98.00

Orchids maintenance media, 50L container. Cost \$155.00

Charcoal, 1kg container. Cost \$56.00

Coconut powder, 1kg container. Cost \$93.00

Office supplies (paper, cartridges, tape, etc) cost \$500.00

Other (advertising, printing brochures, workshop), cost \$1000.00

Total supplies: \$5,532

Travel: Principal Investigator will present results of this project at the American Society of Agronomy or Horticulture Science meeting. Air transportation will be approximately

\$2,000, per diem for 5 days at 200.00/day will amount to \$1000.00, registration fee is expected to be \$300.00, and other accidental expenses will be \$100.00  
 Total amount requested for year 3: \$3,400.00

**Total amount requested for Year 3: \$61,348**

Administrative cost (indirect) 10% of the Project's total: \$17,349.00

Category	Year 1	Year 2	Year 3	Total
Personnel	\$9,880	\$31,200	\$43,680	\$84,760
Fringe	\$1,976	\$6,240	\$8,736	\$16,952
Travel	\$0	\$3,400	\$3,400	\$6,800
Supplies	\$5,982.79	\$8,113	\$5,532	\$19,627.79
Contractual	\$28,000	\$0	\$0	\$28,000
<b>Total</b>	<b>\$45,839.79</b>	<b>\$48,953</b>	<b>\$61,348</b>	<b>\$156,139.79</b>
<b>+10% Indirect:</b>				<b>\$17,349</b>
				<b>-----</b>
				<b>173,488.79</b>

**Total allocated budget for Guam \$173,488.79**

**Program income:**

If any income were generated by the sale of disease-free orchids from this project, money would be re-invested in the tissue culture lab and nursery.



**Project Partner Oversight:**

UOG will administrate the project. The P.I. will supervise all activities, including administrative (P.O.'s, reports) and technical (lab and field work) to ensure that all work is completed as scheduled. UOG/GDA will submit all reports to the Grantor at the times required. Every 6 months the Tissue Culture lab at GDA will submit a report to UOG indicating tissue culture production progress, plant distribution progress, and any problems, if they should occur.

At the end of the 1<sup>st</sup> and 2<sup>nd</sup> years, GDA will assess our progress. Towards the end of the 3<sup>rd</sup> year, GDA and UOG will provide a workshop for all interested parties.

**Project commitment:**

University of Guam commits to administer the project, train GDA personnel, obtain and maintain disease-free propagating stock.

Guam Department of Agriculture will provide space for tissue culture lab and nursery as well as Distribute propagated orchids to local nurseries and growers.