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No. 82-A Constantino Street, Virac
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88 L12 Soldiers Hills 2 Subdivision,
Las Piñas City, The Philippines

Tel.No. (02) 212-71-98 or 952-85-40
(Mrs. B.Y. Dadole)

Cell Nos. 09395695723
Tel. No. 5360262
(Rico)

Emails: jmasagca@yahoo.com
manrico.masagca@dlsu.edu.ph
itmasagca@dasma.dlsu.edu.ph

Weblog:
www.jtmasagca.blogspot.com
<http://multiply/pacifictech09.com>
www.philippinecompanies.com/pacifictech

Workable approaches in Social Studies teaching* and ICT integration in crowded classrooms

Jimmy T. Masagca¹ and Nenita Dionglay²

¹*De La Salle University-Dasmariñas, Cavite 4116, Philippines*

²*Department of Social Sciences, Dasmariñas National High School-Main, Cavite, Philippines*

**Portion of a master's thesis submitted to the Graduate School of Education, Arts and Sciences (GSEAS),
De La Salle University-Dasmariñas, Cavite 4116, Philippines*

Abstract Several teacher-mediated actions using workable teaching approaches and the use of some teaching devices in Social Studies are being practiced not to immunize the students from the overcrowding situation but to introduce creative ways to surmount this phenomenon in Philippine classrooms. This report discusses the various approaches in the teaching of social studies for the secondary schools in selected public schools of the Municipality of Dasmariñas in the province of Cavite in Luzon, Philippines. Moreover, reflections on the integration of technology in the classroom is also included as to how these public school teachers, head teachers and school principals/officials can maximize the use of materials in the World Wide Web (WWW) and the “open access” resources in trying to address such predicament of overcrowding while maintaining quality, equity, responsiveness and relevance of basic education in the Philippines and elsewhere in the world.

Key words ICT integration, secondary schools, teaching strategy

Functional managerial competencies of women executives in Catanduanes, Luzon, Philippines

Lily P. Custodio

Graduate School

Catanduanes State Colleges, Virac 4800, Catanduanes, Philippines

E-mail Address: Dr.Lily_Custodio@yahoo.com.ph

Abstract Given the importance of utilizing the functional management areas in discharging the duties and functions of executives in organizations, the managerial competencies of women executives (=managers and entrepreneurs) in the province of Catanduanes (Luzon, Philippines) were investigated. The descriptive method was used with the questionnaire as the main tool in gathering the data by involving women managers and entrepreneurs and three of their subordinates. Said respondents were selected by convenience sampling and quota sampling. It was ascertained in the study that (1) the managerial competencies of women managers and entrepreneurs in Catanduanes as perceived by them and their subordinates are highly important in discharging managerial duties and functions; (2) the managerial competencies on (a) strategic thinking and scenario-building, (b) analysis, problem solving and decision making, (c) planning and organizing, and (d) change management were perceived differently by the executives and their subordinates; and (3) the executives had similar perceptions on their competencies on the 13 functional management areas investigated in the study. Recommendations were formulated in the light of the findings and conclusions drawn from this investigation.

Key words Women managers and entrepreneurs, managerial competencies, functional management areas, management functions

ICT use and application in *Barangay* governance: Reflections of academics from Luzon

Jimmy T. Masagca¹, Liu Chun² & Manrico T. Masagca^{1,3}

¹*Pacific Island Institute for Pedagogy, Technology, Arts & Sciences, Incorporated (SEC Reg. No. 200916487)
Constantino St. Virac 4008, Catanduanes, Philippines*

²*San Jose Christian Colleges, San Jose City, Philippines*

³*De La Salle University-Manila & San Beda College Alabang, Muntinlupa City, Philippines*

Abstract The uses and application of ICT (the Internet/World Wide Web, e-governance, and the issue of digital divide) in local governance are mostly applicable to the legislative and financial functions of the *Barangay*, the basic administrative or political unit (BPU) of the Philippines. In this study the purposively-selected participants (academics) believe that the issue of digital divide is nevertheless related to effectiveness or efficiency in the delivery of basic services since accessibility (as to IT infrastructure and ICT availability) is a great factor to be considered. The officials of the local government unit are expected to develop mechanisms on how the constituents could have access to the internet or use the ICT facilities that can be carried establishing functional and enabling linkages with the industry, the academe and the government communication network.

Key words ICT, academics, Philippines, perceptions, *Barangay*, governance

TEACHING AND LEARNING

Chemistry teaching techniques employed in secondary schools of Catanduanes, Philippines

Ma. Luz A. Floralde

*Catanduanes State Colleges Panganiban Campus
Panganiban 4600, Catanduanes, Philippines*

Abstract This paper presents the techniques used in teaching Chemistry in selected high schools of Catanduanes in Luzon, Philippines which will serve as inputs in preparing achievement tests for the future and suggest ways to improve teaching and learning in Science. Data were gathered through questionnaire by involving a total of 230 teachers handling Chemistry. Results show that majority of the teacher-respondents used several techniques in teaching, and out of the 14 identified techniques, “cooperative learning” and “problem solving method” are the most commonly used by giving the response of “always” as to frequency. Field studies technique is seldom used by the teachers under consideration. These results indicate that school administrators should encourage Chemistry teachers in the province to use progressive and meaningful teaching techniques in order to enhance quality of teaching and learning in science.

Key words Chemistry teaching, teaching techniques, science teaching, Catanduanes

Micro skills in language learning of senior high school students in Panganiban, Catanduanes (Philippines)

Jennifer Aguilar Berces

*Catanduanes State Colleges Panganiban Campus
Panganiban 4600, Catanduanes, Philippines*

Abstract Eleven (11) micro skills which determine the communication competence of senior high school students in an agricultural industrial college were identified after trialling a proposed Achievement Test in Communication Arts IV (ATCA IV) for English. These are (1) distinguishing between sounds, (2) word stress, (3) sorting details, (4) identifying errors, (5) making inferences, (6) giving the main ideas, (7) correct usage, vocabulary using (8) context clues, (9) word analysis, (10) verbal analogy, and (11) letter writing skills. Results indicate that the students are deficient in six of the micro skills (vocabulary using structural analysis, identifying errors, vocabulary using verbal analogy, correct usage, noting details, and vocabulary using context clues). The need to find out the ways to measure communication skills of the said students are needed in order to propose the most appropriate ATCA IV for English for senior high school students.

Key words Micro skills, communication, competence, language teaching, English, secondary schools

AGRICULTURE & AQUACULTURE

Status and problems of swine production in northeastern Catanduanes (Philippines)

Manuel I. Torio and Sonia A. Torio

*Catanduanes State Colleges Panganiban Campus
Panganiban 4006, Catanduanes, Philippines*

Abstract The paper presents the status and problems of swine (hog) production in the northeastern towns of Catanduanes island, Philippines as to size of capital investment, nearness of the project to the public market, number of hogs raised, and the purpose of producing hogs. With the use of a pretested questionnaire, ninety (90) swine producers in the towns of Viga, Bagamanoc and Panganiban were interviewed on the different aspects of swine production and the problems they experience. Results indicate that majority of the swine producers are involved in farm business using 1 to 10 hogs being raised, with capital investment ranging from ten to 15 thousand pesos and with hog raising farms located 31 to 40 meters away from the residence. These findings indicate that swine business is small utilizing few number of hogs, low capitalization and swine farms associated with the dwelling units of the farmers nearer to the public market.

Key words Swine, swine production, swine business, Catanduanes, hog production

RESEARCH NOTE

Preference of the Philippine green mussel (“Tahong”), *Perna viridis* L. on Abaca or Manila hemp (*Musa textilis*) as substrate for larval settlement in outdoor experiments

Jimmy T. Masagca¹ and Nora I. Alarcon²

¹De La Salle University-Dasmariñas (DLSU-D), Cavite 4116, Philippines and Pacific Island Institute for Pedagogy, Technology, Arts and Sciences, Incorporated (Pacific Tech), Virac 4800, Catanduanes, Philippines
E-mail: jmasagca@yahoo.com

²Science Department, Imus Institute, Cavite 4116, Philippines

*Portion of a Master’s thesis submitted to the Graduate Studies program at DLSU-Dasmariñas, Cavite 4116, Philippines

Abstract This outdoor tank experiment was carried out in the green mussel (“tahong”), *Perna viridis* L. to determine the effects substrates and hydrodynamics (i.e. turbulence) on its larval settlement using abaca or Manila hemp (*Musa textilis* Nee), nylon and bamboo poles. The substrate with abaca fibers was preferred by the larvae of *P. viridis* L. stocked in cemented circular tanks provided with aeration, recirculating and non-recirculating systems to simulate two sets of hydrodynamics. Whether the improvised substrates (made of nylon, abaca fiber and bamboo) were placed from the upper level or to the bottom level of the tanks, larval settlement was not influenced or affected so far.

Key words Larval settlement, green mussel (Tahong), *Perna viridis*, abaca (*Musa textilis*), substrate, reproductive strategy.

Enhancing home agri-production through optimized use of commercial fertilizers for pole snap beans, *Phaseolus vulgaris*

Sonia A. Torio

*Catanduanes State Colleges Panganiban Campus
Panganiban 4006, Catanduanes, Philippines*

Abstract Home farm lots are being used to produce food for many Filipinos. Among the legumes, pole snap beans (*Phaseolus vulgaris* L.) are popularly prepared for soup, stew or baked beans. The need to optimize the use of commercial fertilizers to enhance home agricultural production, trials of fertilizing the soil in simulated home farm lots to produce the said beans was carried out in a 160 m² experimental lot in Panganiban, Catanduanes. A total of 50 gms of *P. vulgaris* and 9.6 kgs of complete fertilizers (14-14-14) were applied in the experimental lot following Randomized Complete Block Design (RCBD) with 4 treatments and replicated 4 times. Different treatments were used (TA-no fertilizer, TB- 0.4 kg/plot, TC- 0.8 kg/plot and TD- 1.2 kg/plot) and pole snap beans were sowed directly on the plots prepared following standard agronomic or agricultural methods. Treatments were applied twice and after 75 days the pods were harvested. The number and length of pods were determined after the experiments and results were compared as to treatments. Results show that TC (0.8 kgs/plot or 400 kg/ha) obtained the highest mean pod harvest of 4.46 kgs/plot or estimated to be 4.46 tons/ha. TC also showed the longest pods reaching to 12.27 cm compared to TB (0.4 kgs/plot or 200 kg/ha) with only 11.32 cm. The treatments used in the study have exerted influential effects in all the parameters. It is recommended that in optimizing the use of commercial fertilizers to use any of the three levels of complete fertilizer (14-14-14) as it proved influential on yield and its components using only at least 0.8 kg/plot.

Key words *Phaseolus vulgaris*, snap beans, fertilizers, home farm lots

Online patent search on various machine inventions for abaca fiber processing

Jimmy T. Masagca & Jonald M. de Belen

*Pacific Island Institute for Pedagogy, Technology, Arts and Sciences Incorporated (Pacific Tech),
Constantino St., Virac 4008, Catanduanes, Philippines*

Abstract With the use of online patent search, the different machines or apparatuses recorded and published in the US and Philippine Patents Offices are reported here. A total of at least 1,000 entries were generated in the web search using abaca machines, abaca fiber extracting or abaca stripping methods. Of these entries, there were 11 patented machines/apparatuses and utility models described that could be used in prior art analyses on new inventions for abaca processing in the province.

Key words Abaca fiber, abaca stripping machines, online patent search, web search, patent claims

BIODIVERSITY AND CONSERVATION

Diagnostic features of the freshwater crab, *Sundathelphusa philippina* from Catanduanes, Philippines*

Jimmy T. Masagca¹

¹University Professor 3, De La Salle University-Dasmarias (DLSU-D), Cavite 4116, Philippines; Pacific Tech Institute SVM-Center for Biodiversity, Island Ecology and Climate Studies (BIOCLIMES), Constantino St., Virac 4800, Catanduanes, Philippines

Abstract An adult female specimen of *Sundathelphusa philippina* (von Martens, 1868) [*Thelphusa*] is reported and described here. The collection was made in abaca planted areas in San Miguel, Catanduanes island, Luzon, Philippines.

Key words Freshwater crab, *Sundathelphusa philippina*, Catanduanes, brachyurans

Frog diversity in abaca-dominated farms of San Miguel, Catanduanes, Philippines*

BR Vargas¹, ET Tribiana² and JT Masagca³

¹*BS Biology Program, Natural Sciences Department Catanduanes State Colleges & currently with the Specialized Medical Center Hospital, Riyadh, Saudi Arabia*

²*Professor & Director of Research, Catanduanes State Colleges, Philippines*

³*De La Salle University-Dasmariñas, Cavite 4116, Philippines and Pacific Tech Institute, Virac 4800, Philippines*

*Portion of an undergraduate thesis submitted at the Catanduanes State Colleges, Virac, Catanduanes, Philippines

Abstract This report presents the different frog species found in the municipality of Bato and San Miguel, Catanduanes (Bicol Region) as to its distribution and relative abundance. A discussion on the over-all habitats of the species identified is also presented focusing on the endemic frog species, *Kaloula kokacii*.

Key words Frogs, Catanduanes, diversity, abaca areas, endemic frog species, *Kaloula kokacii*.

