Plagiarism Checker X Originality Report

Similarity Found: 0%

Date: Wednesday, July 14, 2021
Statistics: 0 words Plagiarized / 1070 Total words
Remarks: No Plagiarism Detected - Your Document is Healthy.

-XX-/$.0 ©2XXEEE Harvesting Solar Energy by Combining Thermal and Photovoltaic System in Fish Dryer 1 st Eli FNugrahani Engineering Management Universitas Internasional Semen Indonesia Gre Inne 2 nd Agroindustrial Technology Universitas Internasional Semen Indonesia Gre Indonesia 3 rd Engineering Management Universitas Internasional Semen Indonesia Abstract— dsiais rpicl ri oyha ada of seoucncdngn Geik Rgeyhich haauaultepoducof 9 hnd ns e erand Her cnaiainfds a of woeaesmd o bakpaes temlcletrn t e evlp smd o gas Te o arsruh t teain t. test is 7 /ml. Keywords— solar energy, thermal collector, photovoltaic, fish dryer I. I Indonesiiaaielowh70% f hterrii Indonesis irmf water [1]. Th of water oed by esihaitown vantes, aliabundant marinita.

In gtal ar oesi are hsourceolivelihoodfor surrounding Thiis coastal rine reas ave vo natural resources th can b as a oivelih r te mmunThefseois othe u resources coastal maareas hat t economy nInonResults m anmane catchescan e sed a ariety products various hods f ng out. e o processingon is an effort tmprove tual of an he lity poestfishery rous. The purpose orongon of principe ian tto vercome cess roduction at hs tme aithe alitof ish bng edo cosumed, he of , a d diversification alan extend hshelf of ish There as to pe fish such as salting, d , scanning, infiltratid coling of f.

One f the st reservvproducts oundiIndonesia sted fiOnan e, alted ia product h t has an imprt polmost 65% orods are stil saltihing proces s there aa procesusolar ergy ich cov the Fish rying e e onally uadryer. Incondfish pon open whis to exposed o sun. onventional dryingdoes vous actrs, t het of harthe dish o that the df te fishs notvenly diribu res ult, the er contned ndfcan iffer betpartand the edones. ienic ors are avoid cnationof andother imputian echnil gfactors atemprat aiflow at nd are i o roThicn reduce quali f gresu[2].

d Indonesian standard 8273 2016, tty oanm the owconttand hlof acterifi the otfln fish, hlevel bca grow when the fis weceersa whh cannotn the body of tish. To decrease te moistu a system needthat e roaccordit its eeds. erefo,it n o researchad dev dng systems. Dryers yb evelopwthe t simplify nd e hpof ryinfi Experistosile ish he carried out makifdryersung ar toptithe dryingpss fish sing enThis usesa light reflectng a mi rror ler the dryer This has levs, a lat over o increase he emperatuithdryingchambThe est o angle 34.94% he ryt careach o C. numbeobin oh lA (udesign ryand (conventional) add bacterial es, ich tatcoentdryi a higher number of ba whch was equal10 6 we cot ryi sing desidwhwas 19.5 6 [3]. Dryers d with the bwer arenuse Derived Fu(RF) ryers.

Rtpe ryers e resultare byutwo tial lo21 tt blower sed od wchhcapaciof kg[Additionoblowers RDF ers bappli fish dbri met d willect sopanelHowever, he uof lwers sed d was 2 wattgy of dried f The ype f th s st he degnia dryer ich s g sle u he s The heater isle th hblplbe iconnect te rack of mea to be dedion, talso uses a blower is edto solpanel. capacitof dryer 50-100 of atwiasizeof 0-15 he t he ryng canreach 5 o C rit day, 30 o C the g evening. hmidity te dryinger iowerhan in tvment [Dryin yrid ems ize ar ergy energy sourceectricity , etc.).

Hybrid metho h dryers se woomopoweenetmain uof hybri ystem btotryto it r re energy tteycan ncrease cicyand ev economi Based thdescriptiof he roblabvas altdevelofrom revious arch the dryi pcess is designed drye r se e by maxize rvesting lar in womethod:th collors solpanelThduizes sun's received te collectait te tin he rying and the In tion, phots used ysolar otovoltaic drivwers monsles. Soar enrgy is u optimally oth t photoninthhe f icreasing thcy o. II. L S T A. Fish Drying acodi donsinNatin adrdS87:2016 (% (1) (%d bss) : ? B. Dryer Design fcin hsn ieted tri s lcedass t r un rrolcat ndte ryer nd rror hion teeodn tidees Ti fs dyra 3ees ui g an l l. e ihefien s hev siga o o C.

icte h nconvnonaldyi as r aceial 6 6 [3]. Figu Cabet typfishryer ith re [3 y elminete emen fvtn[8Manwhe, 7ina of lh 1-15 m Wdt tel te area 17 m 2 2 Vome .6 m 3 3 sh pntdih ordinary pelcoedth b lack sheet stilid PlnSlght slopd (2 oiontleve) Blw r III. MTHODOLOGY enr acoveditoltci ecmmeaic o ona hreesdothe TAE I. E Experime N cndueds fllws a. Terauestermoti tiedtomer b. 2 uit c. Air itu(R hhrois o meu r istre d. e. IV A. Environmental and Product Temperature dyi arTe ietteraan rduc tmprr ae meudsiga temeeh iled re. B. Drying Rate 1. it n ntalof1ouslinBdonthe ms /r Ti hpeseas teihaserae eey Time09:00:001203:001 32 34 36 38 40 42 44 46 48 50 52 Product Temp.

1st Experiment Te Experiment Product Temp. 3rd Experiment Environmental ronmentTe Experiment Environmental Tmt) Ti tenat9: o100ai nb eni hgaph f teiigrigae ti ocreas tees areo it st , nd rd t 15:. C. Dryer Efficiency te ergyouuti sedto arzwatan iete D. Quality of Fish Product 1) Moisture Content rd (bo6 n sus nhg aoat at i a 2) Bacterial Test 5 TAE II B

TOTALACTERIA (CF TYPEF DR 7 7 7 7 i convnon smpesf 1 7 rd 7 5 Experi 1iment Exper3 15,73% 31% 43,15% Effincy (%) Experiment 1Experiment 3 44.13% 44.87% 45.92% Mst Cent(moiur ce twi eeralwashis h hleso 5 E. Comprehensive Performance of Dryer TAE I. CORIS ETWEN 3 dyi, i tartho6bwrwhchae h o 7 , icnglbceri ontntinth od e ish . V. CONCLUSION n efien nd acei estAivlcit hchdefrom tehie fien t4.1%adte ostbtrial 7 CFU/ml A Mat:aer rm Drying rate (Wt Moisture co ?t Duration (hour) Q 1 I 2) 2) t a boptyo f dryer ma ?? ?? atnthoevprio tterauT ?? o C) ?? ?? ?? oduct after d o C) ?? o ?? Hea srb b d r (k ???? 3 ?? 3 Cp Heat specifi o ???? Dryer room tu (o ???? Environme nt temperature (o C) A 2) 3) A Thi reehwapredyLemba Peeanan . R [1] [2] Imbr, EOnal anno J.,“ i [3] f sainlevomt(CU.

[4] g onal Vale 1 Experint 2 Experime 3 Drynge (% Eefcic (%) (CFU/ml 7 7 7 [5] HeizGut d Htner Per,“eatoesig [6] Tu, AOiba,. d akedaM, “e stuy o th i [7] , 3 rd [8] c

INTERNET SOURCES:
