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The Effect of Zaitun Oil Composition on The StainingQuality of Klowong Batik Wax

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ABSTRACT:*Batik isavisualartthatintegraltothe culturalidentity as wellas illustrates the life values uponwhichthelifeofcommunityislaid.Itusesatechniqueofwaxresistdyeingappliedtowholecloth.Thisresearchaimsto knowthecompositionof zaitunoilthatrequiredonbatik klowong andtoknowitseffecttothe results.The researchusedbothqualitativeandquantitativeethodssuchasingredientsmeasurementtechnique,questionnairedistrib utionandvoterscalculation.Thewaxforbatikklowongconsistofzaitunoil,resin,andwhiteparaffin.Thebeeswaxisanind ependentvariablethatisvariedinthecompositionforfivedifferentsample(10gram,20gram,30gram,40gram,50gram). Thesharpnesssofthemotifsisvisuallyanalysedbysixrespondents.TheresultsshowedthatsampleDandEhavebetterqua litythantheothersamples.WhilesampleA hasthehighest level ofmotifs sharpness.*

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I. INTRODUCTION

BatikisaculturalheritageofIndonesiaisundoubtedlyauthenticity,asevidencedbytheawardofbatikasoneofth eworldculturalheritageproducedbytheIndonesiannationbyUNESCOonSeptember28,2009.ThetermBatikcomesfro mtheJavanesevocabularythatisAmbaandTitik.Ambameansclothandpointisawayof givingmotifson fabric byusingliquidnightbymeansindots.Batikworkisbasicallycoverthesurfaceoftheclothwithliquidnight(wax)sothatwh entheclothisdyedintothedyeliquid,theclothclosedthenightdoesnotcomeintocontactwiththecolor.Iftheprocessofma kingbatikmotifisdoneby"written"byusingatoolcalledcanting,thenbatikiscalled batik. Batikwaxisamaterial usedtocover thesurfaceofthefabric accordingtotheimage of batikmotif,sothat the closed surface hasthe propertiesofresistorrejectthecolorgivenonthefabric.Initiallythematerialusedtocovertheclothisaslurryofglutinousri ce,andthefabricismadeofthiscalledsimbutcloth.Afterthediscoveryofbatik candles,glutinousriceisnotusedanymore. Thekeyingredients ofwaxaregondorukem, cat'sresin,paraffin (white andyellow),Microwax, animalfat,coconut oil,candle(evening)wasp,andcandlelancing.Theamountofbasicmaterialsusedandcomparisonarevarious,intheirexp erience.Sothebatikcandleisalreadyacombinationofwaxes. In the beginningbatikcandlesmadeonlyfrom waspwaxonly(peoplecallitJavanesebatiknightorwaspnight),thenbecauseofincreasedexperiencethenmixedwithgon dorukemandresincateyes.Thentorelaxorlowerthemeltingpointthenmixedwithanimalfatorcoconutoil(Susanto,1975).Sofar,peopleonlyknow theprocessofbatikand batikcandlesalonewithoutknowingtheinfluenceofthecomposition ofbatikwaxitselftotheresultsofbatik.Forthat,thisresearchisdonesothatpeopleknowmoreabouttheinfluenceofbatikw axcompositionandmorefocusedoninfluenceofthewaspnightwhichisoneofthebatikwaxes.Thepurposeofthisresearch istoknowthecompositionofthewaspsneededonbatikklowongandwhatinfluencethecompositionofwasptonightonthe qualityofbatikresult.

II. METHODMATERIALS ANDTOOLS

1. Thetoolsused fortheexperimentare:

Makingbatikpatternsconsistingof pencil,moriclothcommonlyused forbatik. Then, makinga samplewaxexperiment consisting ofwok(to heatthewax),stove,mixer,place/moldtoaccommodatewax samples. After that, makingbatik withtoolsCantingklowong,Pan,Stove.Andthen,makebatikcoloringwith dyeBasin(bucket)forthedyecontainer,Large fryingpan,Glassbeaker.

2. Materialsexperimentused forthisexpeimentare:

Samplerecipe:

SampleA :

-20 grdamar(resin) mata kucing. -40 gr gondorukem.

-10 gr white paraffine. -30 grwasp wax.

SampleB:
-20 grdamar(resin) mata kucing. -40 gr gondorukem.
-10 gr white paraffine. -10 grwasp wax.
SampleC :
-20 grdamar(resin) mata kucing. -40 gr gondorukem.
-10 gr white paraffine. -20 grwasp wax.
SampleD :
-20 grdamar(resin) mata kucing. -40 gr gondorukem.
-10 gr white paraffine. -40 grwasp wax
SampleE:
-20 gramsofcat'seye. -40 gr gondorukem.
-10 grofwhiteparaffin. -50 grwasp wax.
Tocreate5(five)prescriptionsampleswaxisthenrequiredmaterialsas muchas:
-100gofcat'seyeresin(@sample= 20 gr).
-200ggondorukem(@samples= 40 grams).
-50 grofwhiteparaffine(@sample= 10 gr).
- 150gr night wasps(differenteachsample).NaphtolAS.OLdanGaramScarletGGforcoloring
- Cold water

3. Experimentsteps
Thestepoftheexperimentisthestepstakenfromthepreparationofrawmaterialstobesomethingthatcanbeobservedinaccordancewiththedesiredresults.Ineachprocesstherareindividualstages.Formoredetailsabouttheexperimentalstepsofthisstudycanbe seeninFigure1 below.

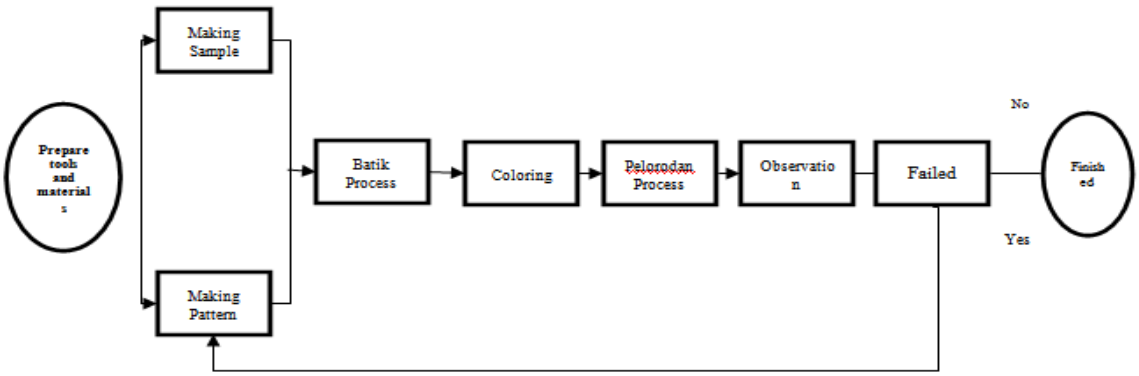
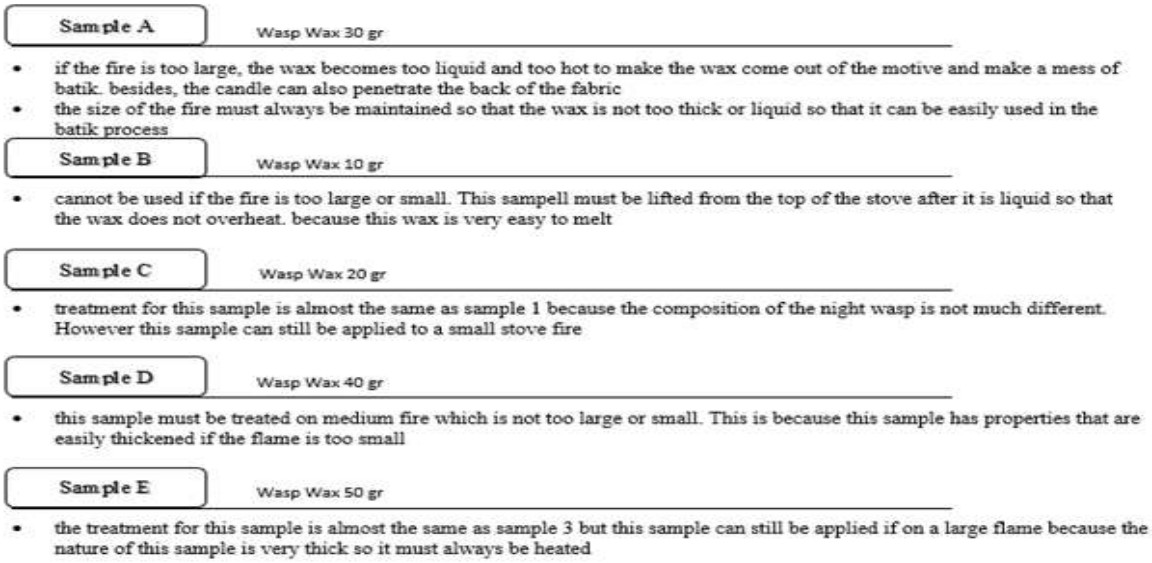


Figure1. Flow Diagramof Research Process

III. RESULTSAND DISCUSSION

1.TestofCandleSamples

Thisstudyaimstoobtainasamplewiththerightcompositionforthetypeofbatikklowongwiththepatternoflines anddots.Theparameterusedinthisresearchisthecompositionofwaspnight.Toobtaintheobjectiveitmustcreateseveralsamplecompositionswithdifferentwasptonneseachsample.Thesamplesmadeinthisresearchare5(five)samples.Thematerialsusedtomakeaneveningconsistofcat'sresin,gondorukem,whiteparadeandwaspnight.Eachmaterialhasitsowncharacteristicsandfunctions.Resinofacat'seyewhenviewedfromitsshapelikeaslightlybrownishandtexturedglassisabithard as arocksugar.Ifheated,thecat'sresin willquicklymeltand forma thickbrownishliquidtexture.

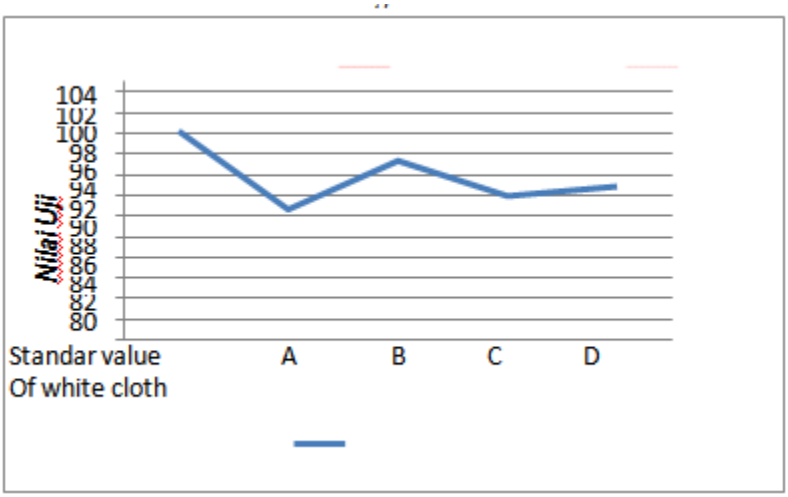


While gondorukemwhen viewed fromits shape likeclearglassyellowandveryhardtexturedlikeglass. If heatedgondorukemsameascatresineyesthat willforma slightlythickyellowliquid.
Furthermore,whiteparaffinwhich,whenviewedfromitsshapelikeanormalwaxwhiteandslightlytexturedsoft. If heateditwillbealittleliquidandclearlike oil. The latterisawaspnightwhich,when viewed fromitsshape likeatexturedtreesap,isverysoftandstickybrownalmosttotheyellow.Ifheatedtheeveningwaspswillforma slightlythickliquidbrown.Thewasp'snightisabithardtomeltbecauseofitssoft,stickytexture.Eachwaxsamplehasspecialtreatmentduringbatikprocesssothattheresultisasexpected.Basedonthe observation,specialtreatmenttobe doneonthewaxsamplecanbe seeninfigure2 above.Thetreatment oneachsampleshouldbeadjustedtotheproperties ofeachmaterial.Toobtainagoodbatikresult, specialtreatment shouldbedonesothatthequality ofcandlesamples remaingoodandnoteasilydamaged.Ifthewaxsamplesaretreatedincorrectly,thewaxsamplemaynotbegoodanymore,soitwillaffecttheresultofthebatik.Onecharacteristicofawaxysamplethatisnotgoodcanbeseenfromthecolorthatisdifferentfromthefirstusageisblackishbrown.Waxsamplesarecontinuouslyheatedusingalargefirecancausethecolorchange.Waxsamples thatare notgoodanymorecanstillbe usedbutwilllookthe differenceintheprocessofbatik.
From thewaxsampletestitcanbeconcludedthatthewaxsampleEisthebestwaxsampleamongtheothers. This isbecausethewax samplehasa composition

Table2. Non-microwaxColorDifferencesTestResult(R%)

No.	Sample Code NonMicrowax	Result of color difference(L*a*b*dE*ab)			
1		L*	a*	b*	dE*ab
2		100,23	0,11	0,05	0,00
3	A	82,25	4,09	9,99	13,12
4	B	98,59	1,02	6,41	7,03
5	C	89,83	7,52	10,53	14,29
6	D	98,51	4,20	6,51	9,34

Testthecolordifference withthecompositionwithoutusingMicrowax(nonmicrowax)can beseen intable 2,InL * oftheA-D samplehasatemporaryincreaseina*oftheA-D samplethetestresultsareupand down.Whiletheb *oftheA-Dsamplealsoexperiencedthesamethingthatistheresultupanddownandford E*abfromtheA-D sampleofcolordifferencetestresultshaveincreased.
RelationbetweenCandlesusingOliveOilwithColorDifferencesTestResult



Fromgraph 4.1.4.Theabove showsthattheresultsoftestingdifferentcolorsbyusingmicrowax. Fromthe graphshowsthevalueof differentcolortest decreased,thedeclinein thenumbers here showthecolortested darker asthedeclineintestnumbers.Testingthecolordifferencethereisascalethat isfromthescaleof0-100,the number approachingthenumber100meansbrightersoviceversaclosetothenumber0meansthedark.Thisshowsthe more microwaxusedbythedifferentcolorvaluesare gettinglower/darker.

IV. CONCLUSIONS

Fromresearchandstudydonethenitcanbeconcludedthat:
Fromtheresultsofourresearchcanbedrawnconclusionas follows:
1.Themorethezaitunoilcompositionisused,minimizingthetemperatureofthemeltingpointduringtheprocessofmeltingtherawmaterialsintothewax.
2.Themorezaitunoilcompositionusedinthesamplethemoreclearandsofttheeveningresultswhenviewed visually.
3.Fromthetestresults,Themorethecompositionofzaitunoildoesnotmakethebetterthequalityofthewax.Thebestwaxquality isobtainedonsampleswiththeleastamountofzaitunoil.
4.Thecompositionofzaitunoilshouldbebalancedwithotheringredientsinordertoproducethebestquality

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