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55.	LinProT: AN INNOVATIVE COURSEWARE WITH INTEGRATION OF AUGMENTED REALITY FOR OPTIMIZATION METHODS	57
56.	HEALTHNAV@INFO: A PERSONAL MOBILE MAPPING HEALTHCARE SYSTEM FOR COMMUNITY ACCESSIBILITY SERVICES	58
57.	MyDISEASE@MAPPER: A FREE AND OPEN SOURCE PLATFORM FOR GEOSPATIAL DISEASE EPIDEMIOLOGY IN MALAYSIA	59
58.	THE DEVELOPMENT OF INTERACTIVE LEARNING METHODS THROUGH AUGMENTED REALITY IN ENGINEERING DRAWING	60
59.	HEALTHY LIFESTYLE WITH DIABETEA	61
60.	EDUCATIONAL ANDROID SIMULATOR OF RES-CIRCUIT QUIZ BOARD	62
61.	BELOVED TRACKER SYSTEM	63
62.	GAS LOAD MONITORING SYSTEM BASED ON IOT TECHNOLOGY	64
63.	MONOENGLISH	65
64.	HOMETUTORINK: A MOBILE APPLICATION FOR HOME-TUTORING SERVICES IN MALAYSIA	66
65.	UTILIZATION OF BEESWAX TRIGONA Sp. AS A BIOSOLAR ADDITION TO INCREASE SUPPLY OF RAW BIODIESEL FRIENDLY IN THE FUTURE	67
66.	ECO BIO-SPRAYER	68
67.	BELIMBING TUNJUK, A CHEMISTRY AND COOL IN JAR: NUTRITIOUS AND SATISFYING LOCAL FRUIT	69
68.	ECOSEGAR BIO-STRAW	70
69.	3 IN 1 BABY CUTIE DISPENSER (BCD)	71
70.	MOBILE ADJUSTABLE ROSTRUM	72
71.	FUN-EDU	73
72.	SMART CHAIR	74
73.	RAK PUSTAKA MINI	75
74.	EZHCHECKUP	76
75.	PHARMACY QR CODE	77
76.	EDU-BAR RULER	78
77.	ACCOUNTANTALIZING	79
78.	EZ-STOPPER	80
79.	FLAWASH	81
80.	IMPLEMENTING THE BOUTIQUE OF CHARITIES IN IMPROVING THE DISCIPLINE AND BASIC NEEDS OF STUDENTS AT PERAK MATRICULATION COLLEGE	82
81.	@LUNA: EFFECT OF MOON PHASE	83
82.	ORGANIC FERTILIZER	84
83.	MECHATRONIC SMART TRAINING KIT	85
84.	GREELA: GREEN PULSED ELECTRIC FIELD-ASISSTED EXTRACTION OF SPIRULINNA SP. CAROTENOID FOR ENRICHED-OLIVE OIL TO ACHIEVE SUSTAINABLE HIGH VITAMIN A OIL AVAILABILITY	86
85.	REVISITING THE INDIGENOUS FOLKLORES: AN EDUTAINMENT PROJECT	87
86.	SUSTAINABLE TABLE POT 1.0	88
87.	MAHIR JAWI (MAJA)	89
88.	CODETOPROTECT	90

# INNOVATION

## CATEGORY

# UTILIZATION OF BEESWAX TRIGONA Sp. AS A BIOSOLAR ADDITION TO INCREASE SUPPLY OF RAW BIODIESEL FRIENDLY IN THE FUTURE

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The growth of the world's population is increasing every year, it is comparable to the use of motor vehicles is increasing as well. Thus, causing energy needs derived from petroleum for each sector increases. But this is not offset by the quantity of fossil fuels continues to decline. Improved fuel consumption and lower oil production greatly affect the world economy, this is evidenced by the increase in fuel prices that occurred during the last 10 years, which was followed by rising prices of basic foodstuffs variety. The solution has been implemented in response to the problem of fuel oil (BBM) that is by making the substitution of fuel oil (BBM) and Biofuel (BBN) as an alternative fuel, one example Biofuel (BBN), which is biodiesel. Biodiesel is an alternative fuel that is derived diesel vegetable and animal oils. Biodiesel has a lower emission levels compared with fuels derived from petroleum, even with the addition of 1% biodiesel in conventional diesel oil (diesel) can improve the lubrication of almost 30%. Biodiesel currently in development that biodiesel made from palm oil which is a product of palm oil. But this raises a new problem in the form of diversion forests into oil palm plantations and palm oil are still not cover the needs of the community will be biodiesel. One example of potential raw material for biodiesel that is beeswax Trigona Sp. Beeswax Trigona Sp. a product of the honey bee which is a constituent component of the honeycomb Trigona Sp and biodiesel derived from wax Trigona Sp. far more than other types of beeswax, and does not need large area in its development. thus, quite effective and efficient if it is used as a raw material for biodiesel. Based on this background, the author creates opportunities Trigona Sp use of beeswax as a biodiesel additive to provide an alternative to the production of biodiesel in the world. With the results the percentage of bees Trigona Sp. beeswax produce more than others which is about 44.74%. This suggests that the potential of beeswax can be used as an alternative raw material for biodiesel.

**Keywords:** Biodiesel, Bees Wax Trigona Sp., Alternative Energy



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