

## 9. LAMPIRAN

### Lampiran 1. Penilaian Kualitas Pustaka

No.	Judul	Penulis dan Tahun Terbit	Kualitas
1	<i>Potential Health Benefits and Scientific Review of Ginger</i>	(Al-Awwadi, 2017)	Q4
2	<i>Gelatin-based Films Reinforced with Montmorillonite and Activated with Nanoemulsion of Ginger Essential Oil for Food Packaging Applications</i>	(Alexandre, Lourenco, Bittante, Moraes, & Sobral, 2016)	Q1
3	<i>Preparation, Characterization and Antimicrobial Activity of Polyvinyl Alcohol/Gum Arabic/Chitosan Composite Films Incorporated with Black Pepper Essential Oil and Ginger Essential Oil</i>	(Amalraj, Haponiuk, Thomas, & Gopi, 2020)	Q1
4	<i>Oleoresins Effect on Cooked Poultry Sausages Microbiological Stability</i>	(Anatoliy Ukrainets, Zheludenko, & Zadkova, 2016)	Not listed
5	<i>Activity Guided Characterization of Antioxidant Components from Essential Oil of Nutmeg (<i>Myristica fragrans</i>)</i>	(Andiani, Gupta, Chatterjee, Variyar, & Sharma, 2015)	Q2
6	<i>Antimicrobial Activity of Essential Oils</i>	(Andrade, Barbosa, Probst, & Junior, 2014)	Q2
7	<i>Oxidative Stability of Microencapsulated Fish Oil During Refrigerated Storage</i>	(Annamalai, C., & Gudipati, 2015)	Q2
8	<i>Phytochemistry and Pharmacologic Properties of <i>Myristica fragrans</i> Hoyutt.: A Review</i>	(Asgarpanah & Kazemivash, 2012)	Not listed
9	<i>Characterization of Sodium Caseinate-Based Edible Films Incorporated with Cinnamon or Ginger Essential Oils</i>	(Atares, Bonilla, & Chiralt, 2010)	Q1
10	<i>Preparation, Characterization, and Antimicrobial Activity of Chitosan/Gum Arabic/Polyethylene Glycol Composite Films Incorporated with Black Pepper Essential Oil and Ginger Essential Oil as Potential Packaging and Wound Dressing Materials</i>	(Augustine, Raj, Haponiuk, Thomas, & Gopi, 2020)	Not listed

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11	<i>Functional Properties of Oleoresin Extracted from White Pepper (Piper nigrum L.) Retting Waste Water</i>	(Aziz, Sofian-Seng, & Mustapha, 2018)	Q2
12	<i>Ginger Processing in India (Zingiber officinale): A Review</i>	(Bag, 2018)	Not listed
13	<i>Changes in the Content of Oleoresin and Pungent Bioactives Principles of Jamaica Ginger (Zingiber officinale Roscoe.) during Maturation</i>	(Bailey-Shaw, Williams, Junor, Gree, & Hibbert, 2008)	Q1
14	<i>Total Antioxidant Activity and Antimicrobial Potency of the Essential Oil and Oleoresin of Zingiber officinale Roscoe</i>	(Bellik, 2014)	Q3
15	<i>Antimicrobial Activity of Ginger (Zingiber Officinale) and Its Application in Food Products</i>	(Beristain-Bauza, et al., 2019)	Q1
16	<i>Natural Antioxidants: Sources, Compounds, Mechanism of Action and Potential Applications</i>	(Brewer, 2011)	Q1
17	<i>Pengaruh Waktu Ekstraksi dan Ukuran Partikel terhadap Berat Oleoresin Jahe yang Diperoleh dalam Berbagai Jumlah Pelarut Organik (Methanol)</i>	(Bustan, Febriyani, & Pakpahan, 2008)	Not listed
18	<i>Essential Oils as Antimicrobials in Food Systems– A Review</i>	(Calo, Crandall, O'Bryan, & Ricke, 2014)	Q1
19	<i>In Vitro and In Vivo Antifungal Activity of Clove (Eugenia caryophyllata) and Pepper (Piper nigrum L.) Essential Oils and Functional Extracts Against Fusarium oxysporum and Aspergillus nigerin Tomato (Solanum lycopersicumL.)</i>	(Castellanos, et al., 2020)	Q1
20	<i>Oxidative Stability, Thermal Stability and Acceptability of Coconut Oil Flavored with Essential Oils from Black Pepper and Ginger</i>	(Chandran, Nayana, Roshini, & Nisha, 2017)	Q2
21	<i>Herbal Spices as Alternative Antimicrobial Food Preservatives</i>	(Chattopadhyay & Bhattacharyya, 2007)	Q1
22	<i>Antibacterial Properties of Nutmeg Oil in Pork and Its Possible Mechanism</i>	(Cui, et al., 2015)	Q3
23	<i>Essential Oil Composition, Antioxidant and Antibacterial Activities of Nutmeg (Myristica fragrans Houtt.) from Garut West Java</i>	(Diki P, Febriani, Riasari, & Aulifa, 2018)	Not listed
24	<i>Kajian Standar Nasional Indonesia Biji Pala</i>	(Dinar, Suyantohadi, & F., 2013)	Not listed

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25	<i>Antioxidant Compound Screening and Chemical Composition of Sweet Ginger (Alpinia coriandriodora D. Fang) Essential Oil and the Mechanism of Scavenging Radicals</i>	(Dong, et al., 2020)	Q3
26	<i>Lipid Sources and Essential Oils Effects on Quality and Stability of Beef Patties</i>	(Dzudic, Kouebou, Essia-Ngang, & Mbofung, 2004)	Q1
27	<i>The Composition of Volatile Oils Derived from Oleoresins</i>	(Eiserle & Rogers, 1972)	Q2
28	<i>Characterization of Antioxidant and Antimicrobial Compounds of Cinnamon and Ginger Essential Oils</i>	(El-Batory, El-Baky, Farag, & Saleh, 2010)	Not listed
29	<i>A Comparative Study on Chemical Composition and Antioxidant Activity of Ginger (Zingiber officinale) and Cumin (Cuminum cyminum)</i>	(El-Ghorab, Nauman, Anjum, Hussain, & Nadeem, 2010)	Q1
30	<i>Spices Oleoresins Containing Antimicrobial Agents Improve the Potential Use of Bio-Composite Films Based on Gelatine</i>	(Figuerola-Lopes, Anreade-Mahecha, & Torres-Vargas, 2018)	Q1
31	<i>Development of Antimicrobial Biocomposite Films to Preserve the Quality of Bread</i>	(Figuerola-Lopez, Andreade-Mahecha, & Torres-Vargas, 2018)	Q1
32	<i>Effects of Essential Oils of Oregano and Nutmeg on Growth and Survival of Yersinia enterocolitica and Listeria monocytogenes in Barbecued Chicken</i>	(Firouzi, Shekarforoush, Nazer, Borumand, & Jooyandeh, 2007)	Q2
33	<i>Chemical Composition and In-Vitro Antimicrobial Activity of Essential Oil of African Nutmeg (Monodora myristica (Gaertn) Dunal on Microorganisms Isolated from Smoke-Dried Catfish (Clarias gariepinus)</i>	(G., A., & O., 2020)	Not listed
34	<i>Isolation of Essential Oil of Nutmeg (Myristica fragrans Houtt.) and Antioxidant Activity Test with DPPH</i>	(Ginting, et al., 2018)	Not listed
35	<i>Piperine-The Bioactive Compound of Black Pepper: From Isolation to Medicinal Formulations</i>	(Gorgani, Mohammadi, Najafpour, & Nikazad, 2016)	Q1

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36	<i>Ginger - Chemistry, Technology, and Quality Evaluation: Part 1</i>	(Govindarajan & Connell, 1983)	Q1
37	<i>Pepper - Chemistry, Technology, and Quality Evaluation</i>	(Govindarajan & Stahl, 1977)	Q1
38	<i>Effects of Herbal Extracts on Quality Traits of Yogurts, Cheeses, Fermented Milks, and Ice Creams: A Technological Perspective</i>	(Granato, et al., 2017)	Q1
39	<i>Chemistry, Antioxidant and Antimicrobial Potential of Nutmeg (Myristica fragrans Houtt.)</i>	(Gupta, Bansal, Babu, & Maithil, 2013)	Q2
40	<i>Physical Parameters, Oleoresin and Volatile Oil Content of Five Pepper (Pepper nigrum L.) Cultivars as Influenced by Maturity</i>	(Hailemichael, Tilahun, & Tsegaw, 2009)	Not listed
41	<i>Composition and Comprehensive Antioxidant Activity of Ginger (Zingiber officinale) Essential Oil from Ecuador</i>	(Hoferl, et al., 2015)	Q3
42	<i>Chemical Composition and Antioxidant Activity of Essential Oil and Oleoresin of Nutmeg (Myristica fragrans Houtt.) Fruits</i>	(I. P. S. Kapoor, Singh, Heluani, Lampasona, & Catalan, 2013)	Q2
43	<i>Consumer Acceptability and Antioxidant Potential of Probiotic-Yogurt with Spices</i>	(Illupapalayam, Smith, & Gamlath, 2014)	Q2
44	<i>Effect of Maturity on some Chemical Constituents of Sri Lanka Pepper (Piper nigrum L.)</i>	(Jansz, Balachandran, Packiyasothy, & Ratnayake, 1984)	Q1
45	<i>Oleoresin Biji Pala Hasil Ekstraksi Maserasi Menggunakan Pelarut Metanol</i>	(Jayanudin & Aryana, 2011)	Not listed
46	<i>Potential Application of Essential Oils as Natural Antioxidants in Meat and Meat Products: A Review</i>	(Jayasena & Jo, 2014)	Q1
47	<i>Antioxidant, Anti-Inflammatory and Antinociceptive Activities of Essential Oils from Ginger</i>	(Jeena, Liju, & Kuttan, 2013)	Q4
48	<i>Aroma Compound Analysis of Piper nigrum and Piper guineense Essential Oils from Cameroon using Solid-Phase Microextraction-Gas Chromatography, Solid-Phase Microextraction-Gas Chromatography-Mass Spectrometry and Olfactometry</i>	(Jirovetz, Buchbauer, Ngassoum, & Giessler, 2002)	Q1



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49	<i>Chemical Composition and Antioxidant Effect of Free Volatile Aglycones from Nutmeg (Myristica fragrans Houtt.) Compared to Its Essential Oil</i>	(Jukic, Politeo, & Milos, 2006)	Q3
50	<i>Essential Oil and Oleoresins of Black Pepper as Natural Food Preservatives for Orange Juice</i>	(Kapoor I. P., Singh, Singh, & Singh, 2012)	Q2
51	<i>Chemistry and in Vitro Antioxidant Activity of Volatile Oil and Oleoresins of Black Pepper (Piper nigrum)</i>	(Kapoor I. , et al., 2009)	Q1
52	<i>Use of Ginger Essential Oil-Fortified Edible Coatings in Kashar Cheese and Its Effects on Escherichia coli O157:H7 and Staphylococcus aureus</i>	(Kavas, Kavas, & Saygili, 2016)	Q2
53	<i>Development of Cellulose Nanofibers Coating Incorporated with Ginger Essential Oil and Citric Acid to Extend the Shelf Life of Ready-to-Cook Barbecue Chicken</i>	(Khaledian, Pajohi-Alamoti, & Bazargani-Gilani, 2019)	Q2
54	Optimasi Proses Ekstraksi dan Karakterisasi Oleoresin Daun Kayu Manis (Cinnamomum Burmanii) Dua Tahap	(Khasanah, Anandhito, Uyun, Utami, & Manuhara, 2017)	Not listed
55	<i>In Vitro Antimicrobial Effects of Myristica fragrans Essential Oil on Foodborne Pathogens and Its Influence on Beef Quality during Refrigerated Storage</i>	(Kiarsi, Hojjati, Behbahani, & Noshad, 2020)	Q3
56	<i>Diversity, Characterization and Utilization of Ginger: A Review</i>	(Kizhakkayil & Sasikumar, 2011)	Q2
57	<i>An Impression on Current Development in the Technology, Chemistry and Biological Activities of Ginger (Zingiber officinale Roscoe)</i>	(Kubra & Rao, 2012)	Q1
58	<i>Recent Trends in the Use of Natural Antioxidants for Meat and Meat Products</i>	(Kumar, Yadav, Ahmad, & Narsaiah, 2014)	Q1
59	<i>Effect of Carrageenan Edible Film with Oleoresins of Piper nigrum (Black Pepper) on Quality of Buffalo Meat Steaks</i>	(Manjunath, et al., 2019)	Not listed
60	<i>Ginger Essential Oil and Supercritical Extract as Natural Antioxidants in Tilapia Fish Burger</i>	(Mattje, Tormen, Bombardelli, Corozza, & Bainy, 2019)	Q2
61	<i>Chemical Composition of Essential Oil of Nutmeg (Myristica fragrans Houtt.) Accessions</i>	(Maya, Zachariah, & Krishnamoorthy, 2004)	Not listed

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62	<i>Supercritical CO2 Extracts and Essential Oil of Ginger (Zingiber officinale R.): Chemical Composition and Antibacterial Activity</i>	(Mesomo, et al., 2013)	Q1
63	<i>Extended Shelf Life of Kareish Cheese by Natural Preservatives</i>	(Metwalli, 2011)	Not listed
64	Efektivitas Mikrokapsul Oleoresin Fuli Pala ( <i>Myristica fragrans</i> Houtt.) sebagai Pengawet Daging Ayam Broiler	(Millan & Sirante, 2020)	Not listed
65	<i>Antimicrobial and Antiproliferative Activities of Black Pepper (Piper nigrum L.) Essential Oil and Oleoresin</i>	(Morsy & El-Salam, 2017)	Q3
66	<i>Cinnamon and Its Derivatives as Potential Ingredient in Functional Food—A review</i>	(Muhammad & Dewettinck, 2017)	Q2
67	Riset Desain dalam Metodologi Ilmiah	(Mulyadi, 2012)	Not listed
68	<i>Ginger Oleoresin Chemical Composition, Bioactivity and Application as Bio-Preservatives</i>	(Murthy, Gautam, & J., 2015)	Q2
69	<i>The Degradation Kinetics of Flavor in Black Pepper (Piper nigrumL.)</i>	(Nisha, Singhal, & Pandit, 2009)	Q1
70	<i>Antimicrobial and Antioxidant Efficiency of Nanoemulsion-Based Edible Coating Containing Ginger (Zingiber officinale) Essential Oil and Its Effect on Safety and Quality Attributes of Chicken Breast fillets</i>	(Noori, Zeynali, & Almasi, 2018)	Q1
71	<i>Parameter Study, Antioxidant Activities, Morphological and Functional Characteristics in Microwave Extraction of Medicinal Oleoresins from Black and White Pepper</i>	(Olalere, et al., 2018)	Not listed
72	<i>Chemical Composition and Antimicrobial Activity of Myristica fragrans &amp; Elettaria cardamomum Essential oil</i>	(Ozkan, et al., 2018)	Not listed
73	<i>Solid <math>\gamma</math>-Cyclodextrin Inclusion Compound with Gingerols, a Multi-Component Guest: Preparation, Properties and Application in Yogurt</i>	(Pais, Pereira, Paz, Cardoso, & Braga, 2020)	Q1
74	<i>Composition and Anti-Microbial Activity of Essential Oil of Myristica fragrans from Andaman Nicobar Island</i>	(Pal, Srivastava, Soni, Kumar, & Tewari, 2011)	Not listed
75	<i>Development of Spicy Flavored Virgin Coconut Oil by Incorporating a Mixture of Spices Oleoresins</i>	(Perera, Ranaweera, Marapana, & Hewavitharana, 2020)	Q2

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76	<i>Antioxidant and Antiangiogenic Activities of the Essential Oils of Myristica fragrans and Morinda citrifolia</i>	(Piaru, Mahmud, Majid, Ismail, & Man, 2012)	Q2
77	<i>Chemical Composition, Antioxidant and Cytotoxicity Activities of the Essential Oils of Myristica fragrans and Morinda citrifolia</i>	(Piaru S. P., Mahmud, Majid, Ismail, & Man, 2011)	Q1
78	<i>Chemical and Sensory Properties of Black Pepper Oil</i>	(Pino, Rodriguez-Feo, Borgers, & Rosado, 1990)	Q1
79	<i>Chitosan/Montmorillonite Bionanocomposites Incorporated with Rosemary and Ginger Essential Oil as Packaging for Fresh Poultry Meat</i>	(Pires, Souza, & Fernando, 2018)	Q1
80	<i>Prospect and Challenges of Essential Oils as Natural Food Preservatives - A Reviews</i>	(Rath, 2007)	Q2
81	<i>Antimicrobial Activities of Oregano and Nutmeg Essential Oils Combined with Emulsifier/Stabilizer Compound in Ready-to-Cook Barbecued Chicken</i>	(S., R., & K., 2014)	Q2
82	<i>The Analysis of Essential Oils and Extract (Oleoresins) from Seasoning-A Critical Review</i>	(Salzer & Furia, 1977)	Q1
83	<i>Studies on the Physicochemical Characteristic of Volatile Oil from Pepper (Piper nigrum) Extracted by Supercritical Carbon Dioxide</i>	(Sankar, 1989)	Q1
84	<i>Natural Antioxidant Extracts as Food Preservatives</i>	(Santos-Sanchez, Salas-Coronado, Valadez-Blanco, Hernandez-Carlos, & Guadarrama-Mendoza, 2017)	Q3
85	<i>Comparative Chemical Composition and Antimicrobial Activity of Berry and Leaf Essential Oils of Piper nigrum L.</i>	(Sasidharan & Menon, 2010)	<i>Not listed</i>
86	<i>Comparative Chemical Composition and Antimicrobial Activity Fresh &amp; Dry Ginger Oils (Zingiber officinale Roscoe)</i>	(Sasidharan & Menon, 2010)	Q4
87	<i>Characterization of Peppercorn, Pepper Oil and Pepper Oleoresin by Vibrational Spectroscopy Methods</i>	(Schulz, Baranska, Quilitzsch, Schutze, & Losing, 2005)	Q1

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88	<i>Major Component and Potential Applications of Plant Essentials Oils as Natural Food Preservatives: A Short Review Research Result</i>	(Sessou, Farougou, & Sohounhloue, 2012)	<i>Not listed</i>
89	<i>Bioactives in Spices and Spices Oleoresins: Phytochemicals and Their Beneficial Effects in Food Preservation and Health Promotion</i>	(Shahidi & Hossain, 2018)	<i>Not listed</i>
90	<i>Effects of Storage Temperatures and Essential Oils of Oregano and Nutmeg on the Growth and Survival of Escherichia coli O157:H7 in Barbecued Chicken Used in Iran</i>	(Shekarforoush, Nazer, Firouzi, & Rostami, 2007)	Q1
91	<i>Action of Ginger Essential Oil (Zingiber officinale) Encapsulated in Proteins Ultrafine Fibers on the Antimicrobial Control in Situ</i>	(Silva, et al., 2018)	Q1
92	<i>Chemistry, Antioxidant and Antimicrobial Investigations on Essential Oil and Oleoresins of Zingiber officinale</i>	(Singh, et al., 2008)	Q1
93	<i>Chemical, Antioxidant and Antifungal Activities of Volatile Oil of Black Pepper and Its Acetone Extract</i>	(Singh G. , Marimuthu, Catalan, & Lampasona, 2004)	Q1
94	<i>Chemical Constituents, Antioxidative and Antimicrobial Activities of Essential Oil and Oleoresin of Tailed Pepper (Piper Cubeba L)</i>	(Singh G. , Marimuthu, Heluani, & Catalan, 2007)	Q2
95	<i>Studies on Essential Oils, Part 42: Chemical, Antifungal, Antioxidant and Sprout Suppressant Studies on Ginger Essential Oil and Its Oleoresin</i>	(Singh, Maurya, Catalan, & Lampasona, 2005)	Q2
96	<i>Chemistry, Antioxidant and Antimicrobial Potentials of White Pepper (Piper nigrumL.) Essential Oil and Oleoresins</i>	(Singh S. , et al., 2013)	Q3
97	<i>The Antibacterial and Antifungal Activity of Essential Oil Derived from the Flesh of Nutmeg Fruit</i>	(Sipahelut, Patty, Patty, Kastanja, & Lekahena, 2019)	Q4
98	<i>Antimicrobial Effects of Spices and Herbs Essential Oils</i>	(Skrinjar & Nemet, 2009)	Q3
99	<i>Effect of Nutmeg (Myristica fragrans) Essential Oil on the Oxidative and Microbial Stability of Cooked Sausage during Refrigerated Storage</i>	(Sojic, et al., 2015)	Q1
100	<i>Shelf Life Assessment of Fresh Poultry Meat Packaged in Novel Bionanocomposite of Chitosan/Montmorillonite Incorporated with Ginger Essential Oil</i>	(Souza, et al., 2018)	Q2



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101	<i>Composition and Antimicrobial Activity of Ginger Essential Oil from Vietnam</i>	(Stoyanova, Konakchiev, Damyanova, Stoilova, & Suu, 2006)	Q3
102	<i>Antioxidant Effects of Essential Oil and Oleoresin of Black Pepper from Supercritical Carbon Dioxide Extractions in Ground Pork</i>	(Tipsrisukond, Fernando, & Clarke, 1998)	Q1
103	<i>Composition and Antifungal Activity of The Brazilian Myristica fragrans Houtt Essential Oil</i>	(Valente, Jham, Dhingra, & Ghiviriga, 2011)	Q3
104	<i>Limonene, the Compound in Essential Oil of Nutmeg Displayed Antioxidant Effect in Sunflower Oil during the Deep-Frying of Chinese Maye</i>	(Wang, Dong, Wang, Wang, & Fan, 2019)	Q2
105	<i>Physical Characterization and Pork Packaging Application of Chitosan Films Incorporated with Combined Essential Oils of Cinnamon and Ginger</i>	(Wang, et al., 2017)	Q1
106	<i>Natural Antioxidants from Herbs and Spices</i>	(Yanishlieva, Marinova, & Pokorny, 2006)	Q1
107	<i>A Functional Beverage: Lemonade</i>	(Yekeler, Ozyurek, & Taner, 2013)	Not listed
108	<i>Antibacterial Effects of Natural Essential Oils from Ginger and Mustard against Vibrio Inoculated on Sliced Raw Flatfish</i>	(Yoo, Kim, & Shin, 2006)	Q2
109	<i>Effect of Black Pepper Essential Oil on the Quality of Fresh Pork during Storage</i>	(Zhang, et al., 2016)	Q1
110	<i>Characterisation of Microemulsion Nanofilms based on Tilapia fishskin Gelatine and ZnO Nanoparticles Incorporated with Ginger Essential Oil: Meat Packaging Application</i>	(Zhang, et al., 2017)	Q1
111	<i>Plasma Enhanced-Nutmeg Essential Oil Solid Liposome Treatment on the Gelling and Storage Properties of Pork Meat Batters</i>	(Zhu, Li, Cui, & Lin, 2020)	Q1

## Lampiran 2. Hasil Antiplagiasi



**1.24%** PLAGIARISM  
APPROXIMATELY

## Report #12353173

PENDAHULUAN Latar Belakang Warga Indonesia tentunya tidak asing dan sangat dekat dengan rempah-rempah. Sumber daya hayati ini sering digunakan sebagai pewarna, penguat cita rasa, penguat aroma hingga berfungsi untuk pengawetan makanan dan minuman (FAO, 2005). Negara Indonesia merupakan salah satu negara potensial penghasil rempah-rempah di dunia. Menurut FAOStat (2020) terhitung sejak tahun 2010 hingga 2018, Indonesia menempati posisi ke-4 terbesar di dunia untuk penghasil rempah-rempah. Rempah-rempah yang memiliki peran penting dalam perekonomian Indonesia antara lain cengkeh, pala, lada, kayu manis, vanili dan jahe (Sulaiman, et al., 2018). Pada penelitian ini, jenis rempah dibatasi pada tiga jenis rempah, yaitu jahe, pala dan lada. Menurut FAOStat (2020), Indonesia menempati posisi ke-2 terbanyak di dunia untuk rata-rata produksi pala dan lada, sedangkan untuk rata-rata produksi jahe menempati posisi ke-4 terbanyak di dunia. Indonesia juga mencatatkan sebagai 5 negara pengeksport teratas di dunia untuk ekspor pala dan lada (FAOStat, 2020). Namun, proses pendistribusian komoditi rempah segar tersebut tentunya tidak luput dari kecacatan sehingga dapat menurunkan mutu penerimaan rempah ekspor. Seiring perkembangan industri, muncul bentuk alternatif olahan rempah-rempah, yaitu berupa minyak atsiri dan oleoresin. Oleoresin merupakan