

JENIS SUMBER NEKTAR DAN PENGARUH PERBEDAAN LOKASI PENEMPATAN STUP SERTA CARA EKSTRAKSI TERHADAP KUALITAS MADU LEBAH *Trigona sp.* DI TAMAN NASIONAL WAY KAMBAS

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INTISARI

Madu adalah cairan alami yang dihasilkan oleh lebah madu dari nektar bunga atau bagian tanaman lainnya. Madu memiliki banyak khasiat bagi tubuh manusia dan manfaat lain. Lebah madu banyak dibudidayakan karena meningkatnya permintaan masyarakat. Jenis lebah tanpa sengat yang menghasilkan madu salah satunya adalah lebah *Trigona sp.* Salah satu faktor yang penting dalam pembudidayaan lebah madu yaitu lokasi. Lokasi budidaya lebah madu yang baik adalah suatu tempat yang terdapat jenis vegetasi sumber nektar yang cukup untuk pakan lebah. Selain itu, cara pemanenan serta penanganan pasca panen juga dapat memengaruhi kualitas mutu madu. Tujuan dari penelitian ini yaitu mengidentifikasi jenis vegetasi sumber nektar di sekitar stup-stup lebah *Trigona sp.* yang ditempatkan di dekat hutan, dekat sumber air, dan pekarangan rumah, selain itu mengetahui pengaruh penempatan stup-stup lebah di tiga lokasi berbeda dan pengaruh cara ekstraksi serta interaksi lokasi dan cara ekstraksi terhadap kualitas mutu madu *Trigona sp.* yang berasal dari Kelompok Tani Hutan (KTH) Mekar Sari binaan Taman Nasional Way Kambas.

Penelitian ini menggunakan sampel madu yang diperoleh dari tiga lokasi yaitu di dekat hutan, dekat sumber air, dan pekarangan rumah dan diekstraksi dengan cara pemanasan dan tanpa pemanasan dengan tiga kali ulangan. Pengujian mutu yang dilakukan pada sampel madu yaitu uji organoleptik meliputi bau dan rasa, uji laboratoris meliputi gula pereduksi, padatan tak larut, kadar abu, keasaman, kadar air, dan baume dengan standar pengujian SNI 8664:2018, dan uji kandungan senyawa kimia dengan pengujian GC-MS. Analisis hasil dari data pengujian dilakukan dengan metode anova dua arah dan dilanjutkan dengan uji Tukey.

Terdapat 8 jenis vegetasi sumber nektar di lokasi dekat hutan dan dekat sumber air, serta 6 jenis vegetasi sumber nektar di pekarangan rumah. Faktor lokasi memberikan pengaruh nyata terhadap nilai kadar air, nilai gula pereduksi, dan nilai padatan tak larut. Sedangkan faktor ekstraksi memberikan pengaruh nyata terhadap nilai kadar air, nilai baume, nilai gula pereduksi, nilai kadar abu, dan nilai keasaman. Dan interaksi faktor ekstraksi dan lokasi tidak memberikan pengaruh nyata terhadap kualitas mutu sampel madu.

Kata Kunci : madu, *Trigona sp.*, mutu, lokasi, cara ekstraksi.

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TYPES OF NECTAR SOURCES AND THE INFLUENCE OF DIFFERENT STUP PLACEMENT LOCATIONS AND EXTRACTION METHODS ON THE QUALITY OF BEE HONEY *Trigona sp.* IN WAY KAMBAS NATIONAL PARK

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ABSTRACT

Honey is a natural liquid produced by honey bees from the nectar of flowers or other plant parts. Honey has many properties for the human body and other benefits. Honey bees are widely cultivated due to increasing public demand. One type of stingless bee that produces honey is the bee *Trigona sp.* One important factor in honey bee cultivation is location. A good honey bee cultivation location is somewhere where there is a type of vegetation source of nectar that is sufficient for bee feed. In addition, the way of harvesting and post-harvest handling can also affect the quality of honey quality. The purpose of this study was to identify the type of nectar source vegetation around the bee stups of *Trigona sp.* which is placed near forests, near water sources, and yards, in addition to knowing the influence of placing bee stups in three different locations and the influence of extraction methods and location interactions and extraction methods on the quality of *Trigona sp.* honey. who came from the Mekar Sari Forest Farmer Group (KTH) assisted by Way Kambas National Park.

This study used honey samples obtained from three locations, namely near forests, near water sources, and home yards and extracted by heating and without heating with three repeats. Quality tests carried out on honey samples are organoleptic tests including odor and taste, laboratory tests including reducing sugars, insoluble solids, ash content, acidity, moisture content, and baume with SNI 8664:2018 test standards, and chemical compound content tests with GC-MS testing. Analysis of the results of the test data was carried out by the two-way anova method and continued with the Tukey test.

There are 8 types of nectar source vegetation in locations near forests and near water sources, as well as 6 types of nectar source vegetation in the yard of the house. The location factor exerts a significant influence on the value of moisture content, the value of reducing sugars, and the value of insoluble solids. While the extraction factor has a real influence on the value of moisture content, baume value, reducing sugar value, ash content value, and acidity value. And the interaction of extraction factors and location does not have a real effect on the quality of honey samples.

Keywords : honey, *Trigona sp.*, quality, location, extraction method.

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