

KRISTIN NATALIA AMBAT NRP 190351100034 Kandungan Proksimat *Nostoc commune* Pada Habitat yang Berbeda. Dibawah bimbingan **Indah Wahyuni Abida, S.Pi., M.Si**

ABSTRAK

Nostoc commune menjadi salah satu mikroalga yang dapat ditemukan di Indonesia. *Nostoc commune* merupakan mikroalga biru-hijau yang dapat dimakan dan telah digunakan sebagai makanan lezat atau obat herbal di berbagai negara. *Nostoc commune* mengandung konsentrasi karbohidrat, protein kasar, dan zat gizi mikro yang cukup tinggi (Martinez-Goss *et al.*, 2021). Tujuan dari penelitian ini yaitu menganalisis kandungan proksimat *Nostoc commune* dari habitat persawahan, kolam lele dan sungai serta mengetahui hubungan kualitas air terhadap kandungan proksimat *Nostoc commune*. Penelitian ini dilaksanakan dari bulan September – November 2022. Metode yang digunakan dalam penelitian ini meliputi 2 langkah yaitu pengamatan secara langsung (*in situ*) dan pengamatan di laboratorium. Pengamatan secara langsung dilakukan dengan pengambilan sampel *Nostoc commune* secara *purposive sampling* dan air serta pengukuran kualitas air *in situ* yang meliputi pH, DO (*Dissolved Oxygen*), suhu, salinitas kecerahan dan intensitas cahaya yang dilakukan dengan 3 titik lokasi dan pengulangan waktu 2 kali. Pengamatan di laboratorium meliputi analisa proksimat, nitrat dan fosfat. Persawahan memperoleh rata-rata nilai proksimat *Nostoc commune* untuk kadar air 24,78%, kadar abu 0,61%, kadar lemak 0,92%, kadar protein 0,47%, kadar serat kasar 1,2% dan kadar karbohidrat 72,04%. Kolam lele memperoleh rata-rata kadar air 85,57%, kadar abu 1,19%, kadar lemak 0,55%, kadar protein 0,37%, kadar serat kasar 0,63% dan kadar karbohidrat 11,69%. Sungai memperoleh rata-rata kadar air 87,51%, kadar abu 1,16%, kadar lemak 0,45%, kadar protein 0,22%, kadar serat kasar 0,60% dan kadar karbohidrat 10,07%. Kualitas air atau faktor lingkungan memiliki hubungan yang dekat dengan kandungan proksimat *Nostoc commune* berdasarkan uji PCA. Kandungan proksimat *Nostoc commune* pada ketiga habitat memiliki nilai yang berbeda nyata pada kandungan kadar protein, serat kasar dan karbohidrat.

Kata Kunci: *Nostoc commune*; Kandungan Proksimat; Habitat

KRISTIN NATALIA AMBAT NRP 190351100034 Proximate Content of *Nostoc commune* in Different Habitats. Under the guidance of **Indah Wahyuni Abida, S.Pi., M.Si**

ABSTRACT

Nostoc commune become one of the microalgae that can be found in Indonesia. *Nostoc commune* is an edible blue-green microalgae that has been used as a delicacy or herbal medicine in various countries. *Nostoc commune* contains high concentrations of carbohydrates, crude protein, and micronutrients (Martinez-Goss *et al.*, 2021). The purpose of this research is to analyze the proximate content of *Nostoc commune* from the habitat of rice fields, catfish ponds and rivers as well as knowing the relationship of water quality to proximate content *Nostoc commune*. This research was conducted from September to November 2022. The method used in this research included 2 steps, namely direct observation (on site) and observations in the laboratory. Direct observation was carried out by taking samples *Nostoc commune* regularly purposive sampling and water as well as measurement of water quality on site which includes pH, DO (Dissolved Oxygen), temperature, brightness, salinity and light intensity were carried out with 3 location points and 2 times repetition. Observations in the laboratory include proximate analysis, nitrate and phosphate. Rice fields get the average proximate value of *Nostoc commune* for water content 24.78%, ash content 0.61%, fat content 0.92%, protein content 0.47%, crude fiber content 1.2% and carbohydrate content 72.04%. The catfish ponds obtained an average moisture content of 85.57%, ash content of 1.19%, fat content of 0.55%, protein content of 0.37%, crude fiber content of 0.63% and carbohydrate content of 11.69%. The river obtained an average water content of 87.51%, ash content of 1.16%, fat content of 0.45%, protein content of 0.22%, crude fiber content of 0.60% and carbohydrate content of 10.07%. Water quality or environmental factors have a close relationship with the proximate content *Nostoc commune* based on PCA test. Proximate content of *Nostoc commune* from three habitats had significantly different values for the content of protein, crude fiber and carbohydrates.

Keyword: *Nostoc commune*; Proximate Content; Habitats