

**SEBARAN SALINITAS DAN STATUS KESUBURAN KIMIA TANAH
PADA LAHAN PERTANIAN DI KALURAHAN PONCOSARI,
KAPANEWON SRANDAKAN, KABUPATEN BANTUL**

Oleh: Andra Muhammad Putra
Dibimbing Oleh: Dyah Arbiwati

ABSTRAK

Fenomena pasang surut air laut menjadi salah satu permasalahan bagi lahan pertanian di daerah pesisir. Tujuan dari penelitian ini yaitu untuk menentukan status salinitas dan status kesuburan kimia tanah pada lahan pertanian di Kalurahan Poncosari. Metode penelitian berupa deskriptif kuantitatif dan metode penentuan lokasi penelitian secara purposive sampling yaitu pada lahan pertanian di Kalurahan Poncosari yang irigasinya dari Sungai Progo dan saluran irigasi dari Sungai Bedog yang dipengaruhi oleh pasang surut air laut. Metode penentuan titik sampel yaitu purposive sampling berdasarkan jarak dari kali progo ke timur berjarak 200 meter, kemudian jarak antar titik selanjutnya 600 meter, dan dari garis pantai menuju utara berjarak 500 meter, kemudian jarak antar titik selanjutnya berjarak 1333 meter. Total titik sampel tanah sebanyak 18 titik, untuk uji salinitas kriteria penilaiannya berdasarkan Balai Pengujian Standar Instrumen Tanah Dan Pupuk, (2023). Sementara hasil analisis kimia tanah dilakukan pencocokan dengan Penilaian sifat kimia tanah menurut Petunjuk Teknis Evaluasi Kesuburan Tanah dari Pusat Penelitian Tanah, Bogor (1995). Hasil penilaian tersebut didasarkan oleh 5 parameter berupa kapasitas pertukaran kation (KPK), kejenuhan basa (KB), fosfor (P_2O_5), kalium (K_2O), dan C-Organik. Sifat kimia tanah di Kalurahan Poncosari, Kapanewon Srandakan, Kabupaten Bantul, Daerah Istimewa Yogyakarta mempunyai nilai Salinitas (EC 1:5) berkisar 0.064 mS/cm hingga 0.513 mS/cm dan nilai salinitas (Ece) ekstrak jenuh 0.523-3.627 mS/cm⁻¹, nilai KPK berkisar antara 1.00 - 26.09 cmol (+) kg⁻¹ dengan harkat rendah hingga tinggi, nilai KB berkisar antara 92.73 - >100% dengan harkat sangat tinggi, nilai P_2O_5 berkisar antara 58 - 180 (mg/100g) dengan harkat tinggi hingga sangat tinggi, nilai K_2O berkisar antara 5 - 73 (mg/100g) dengan harkat sangat rendah hingga sangat tinggi, nilai C-Organik berkisar antara 0.60 - 2.78% dengan harkat sangat rendah hingga sedang, nilai pH 7.99 - 8.93 yang memiliki harkat agak alkalis hingga alkalis. Berdasarkan hal tersebut maka di Kalurahan Poncosari status salinitas (EC 1:5) termasuk ke dalam kelas sangat rendah dan Ece ekstrak jenuh termasuk kelas bebas garam hingga sedikit garam, sedangkan untuk status kesuburan tanah termasuk ke dalam kelas sangat rendah hingga tinggi.

Kata Kunci: salinitas, status kesuburan tanah, sifat kimia tanah, lahan pertanian.

**DISTRIBUTION OF SALINITY AND SOIL CHEMICAL FERTILITY
STATUS ON AGRICULTURAL LAND IN PONCOSARI VILLAGE,
SRANDAKAN KAPANEWON, BANTUL REGENCY**

By: Andra Muhammad Putra
Supervised by: Dyah Arbiwati

ABSTRACT

The phenomenon of sea tides is one of the problems for agricultural land in coastal areas. The purpose of this study is to determine the salinity status and chemical fertility status of the soil on agricultural land in Poncosari Village. The research method is descriptive quantitative and the method of determining the research location is purposive sampling, namely on agricultural land in Poncosari Village which is irrigated from the Progo River and irrigation channels from the Bedog River which are affected by sea tides. The method of determining the sample points is purposive sampling based on the distance from the Progo River to the east is 200 meters, then the distance between the next points is 600 meters, and from the coastline to the north is 500 meters, then the distance between the next points is 1333 meters. A total of 18 soil sample points, for the salinity test the assessment criteria are based on the Soil and Fertilizer Instrument Standard Testing Center, (2023). Meanwhile, the results of the soil chemical analysis were matched with the Assessment of soil chemical properties according to the Technical Guidelines for Soil Fertility Evaluation from the Soil Research Center, Bogor (1995). The assessment results are based on 5 parameters in the form of cation exchange capacity (CEC), base saturation (KB), phosphorus (P₂O₅), potassium (K₂O), and C-Organic. The chemical properties of the soil in Poncosari Village, Srandakan Subdistrict, Bantul Regency, Yogyakarta Special Region have a Salinity value (EC 1:5) ranging from 0.064 mS/cm to 0.513 mS/cm and a saturated extract salinity value (E_{ce}) of 0.523-3.627 mS/cm-1, the KPK value ranges from 1.00 - 26.09 cmol (+) kg⁻¹ with a low to high rank, the KB value ranges from 92.73 - >100% with a very high rank, the P₂O₅ value ranges from 58 - 180 (mg/100g) with a high to very high rank, the K₂O value ranges from 5 - 73 (mg/100g) with a very low to very high rank, the C-Organic value ranges from 0.60 - 2.78% with a very low to moderate rank, the pH value 7.99 - 8.93 which has a slightly alkaline to alkaline value. Based on this, in Poncosari Village, the salinity status (EC 1:5) is included in the very low class and the E_{ce} of saturated extract is included in the salt-free to slightly salt class, while the soil fertility status is included in the very low to high class.

Keywords: salinity, soil fertility status, soil chemical properties, agricultural land.