

**PENGARUH MUSIM DAN BAGIAN TANAMAN TERHADAP
KOMPOSISI KIMIA DAN KANDUNGAN ASAM OKSALAT
RUMPUT *Pennisetum Purpureum dwarf***

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INTISARI

Penelitian ini bertujuan untuk mengetahui komposisi kimia dan kandungan asam oksalat rumput *Pennisetum purpureum dwarf* pada musim yang berbeda yaitu musim kemarau dan musim penghujan, serta bagian tanaman yaitu daun dan batang. Sampel rumput *Pennisetum purpureum dwarf* diambil secara acak pada satu komposit. Analisis komposisi kimia pakan dilakukan dengan analisis proksimat, sedangkan kandungan asam oksalat dianalisis dengan menggunakan metode *High Performance Liquid Chromatography* (HPLC). Hasil penelitian menunjukkan bahwa daun memiliki nilai BK yang lebih tinggi (21,55%) dibandingkan pada bagian batang (12,01%) ($P < 0,05$), dan musim kemarau lebih tinggi (18,37%) dibandingkan musim penghujan (15,21%) ($P < 0,05$); musim kemarau memiliki nilai BO yang lebih tinggi (88,70%) dibandingkan pada musim penghujan (86,84%) ($P < 0,05$); batang memiliki nilai SK yang lebih tinggi (32,53%) dibandingkan daun (30,69%) ($P < 0,05$); daun memiliki nilai PK yang lebih tinggi (11,49%) dibandingkan pada bagian batang (7,67%) ($P < 0,05$), dan musim penghujan lebih tinggi (10,15%) dibandingkan musim kemarau (9,02%) ($P < 0,05$); Kandungan oksalat pada perbedaan musim dan bagian tanaman signifikan. Berdasarkan penelitian dapat disimpulkan bahwa kandungan asam oksalat pada musim penghujan lebih tinggi (1,94%) dibandingkan pada musim kemarau (0,64) ($P < 0,05$), demikian juga pada bagian batang kandungan oksalat lebih tinggi (1,39%) dibandingkan pada bagian daun (1,17%) ($P < 0,05$). Berdasarkan penelitian dapat disimpulkan bahwa musim berpengaruh terhadap kandungan asam oksalat rumput *Pennisetum purpureum dwarf*, sedangkan bagian tanaman mempengaruhi kandungan komposisi kimia dan asam oksalat.

(Kata kunci: komposisi kimia, asam oksalat, *Pennisetum purpureum dwarf*, musim, bagian tanaman).

**EFFECT OF SEASON AND PLANT SECTIONS ON CHEMICAL
COMPOSITION AND OXALIC ACID CONTAIN OF
Pennisetum purpureum dwarf GRASS**

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ABSTRACT

This research was aimed to know the chemical composition and oxalic acid contain of *Pennisetum purpureum dwarf* in different seasons that were dry season and rainy season, plants sections included the leaves and stems. *Pennisetum purpureum dwarf* sampling was taken randomly were composite into one. The samples were analyzed by proximate analysis, where as the oxalic acid contains were analyzed using *High Performance Liquid Chromatography* (HPLC). Data were analyzed using analysis of various for completely randomized of factorial model (2x2). The result showed that the leave of *Pennisetum purpureum dwarf* has higher dry matter (21,55%) than the stem (12,01%) ($P < 0.05$), and dry season has higher (18,37%) than rainy season (15,21%) ($P < 0.05$); dry season has higher nilai organic matter (88,70%) than rainy season (86,84%) ($P < 0.05$); the stem has higher crude fiber (32,53%) than the leaves (30,69%) ($P < 0.05$); the leaves has higher crude protein (11,49%) than the stem (7,67%) ($P < 0.05$), and rainy season has higher (10,15%) than dry season (9,02%) ($P < 0.05$); The oxalic acid was significant on the different season. Based on the study, it can be concluded that the contain of oxalic acid in rainy season was higher (1,94%) than in dry season (0,64%) ($P < 0.05$). However, the contain of oxalic acid in steam was higher (1,39%) than the leaves (1,17%) ($P < 0.05$). Based on the study, it can be concluded that the different seasons may affect the contain of oxalic acid in *Pennnisetum purpureum dwarf*. However, the different parts of plant may affect the chemical composition and oxalic acid.

(Keywords: chemical composition, oxalic acid, *Pennisetum purpureum dwarf*, season, section of plants).