

**LARUTAN BUAH NAGA MERAH DAN UBI JALAR UNGU  
SEBAGAI PEWARNA PLAK GIGI PADA SISWA  
SMA N 1 PANGANDARAN**

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**ABSTRAK**

Latar belakang: Plak gigi dapat dilihat dengan menggunakan zat warna kimia yang dinamakan *disclosing solution*. Buah naga merah mengandung *betasianin* dan ubi jalar ungu mengandung *antosianin* sehingga kandungan tersebut dapat dijadikan *disclosing solution* alami. Tujuan: untuk menganalisis larutan buah naga merah dan ubi jalar ungu sebagai pewarna plak gigi. Penelitian ini menggunakan metode *Quasi Experimental Design* dengan rancangan penelitian *Two Group Posttest Only Design* dan sampel diambil dengan *purposive sampel* hingga didapatkan 38 orang dan dibagi 2 kelompok, masing-masing kelompok berjumlah 19 orang. Data diperoleh dari indeks *PHP* serta observasi warna, waktu dan rasa dengan lembar ceklis. Hasil penelitian menggunakan uji *Mann-Whitney* didapatkan nilai indeks plak 0,182 sehingga tidak terdapat perbedaan signifikan antara larutan buah naga merah dan ubi jalar ungu sebagai pewarna plak gigi. Observasi warna didapatkan 0,432 dan waktu 0,092 sehingga tidak terdapat perbedaan antara kedua larutan tersebut. Observasi rasa didapatkan 0,001 sehingga terdapat perbedaan antara larutan tersebut. Kesimpulan: Larutan buah naga merah lebih efektif dalam pewarna plak gigi, ditinjau dari hasil uji statistik, nilai rata-rata indeks plak dan hasil observasi warna, waktu, rasa.

Kata kunci: Buah naga merah, ubi jalar ungu, plak gigi, *disclosing solution*

**SOLUTION OF RED DRAGON FRUIT AND PURPLE SWEET POTATO  
AS TOOTH PLAC DYEING IN STUDENTS  
SMA N 1 PANGANDARAN**

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**ABSTRACT**

*Background: Dental plaque can be seen using a chemical dye called a disclosing solution. Red dragon fruit contains betacyanin and purple sweet potato contains anthocyanin so that these ingredients can be used as a natural disclosing solution. Purpose: to analyze a solution of red dragon fruit and purple sweet potato as dental plaque dyes. This study used the Quasi Experimental Design method with the Two Group Posttest Only Design research design and samples were taken purposively until 38 people were obtained and divided into 2 groups, each group consisting of 19 people. Data were obtained from the PHP index as well as observations of color, time and taste using checklists. The results of the study using the Mann-Whitney test obtained a plaque index value of 0.182 so that there was no significant difference between red dragon fruit and purple sweet potato solutions as dental plaque dyes. Color observations were obtained 0.432 and time 0.092 so that there was no difference between the two solutions. Taste observations were obtained 0.001 so that there were differences between the solutions. Conclusion: Red dragon fruit solution is more effective in staining dental plaque, in terms of statistical test results, the average plaque index value and the results of observations of color, time, taste.*

*Keywords: Red dragon fruit, purple sweet potato, dental plaque, disclosing solution*