

## ABSTRAK

**Latar belakang :** Pengharum ruangan berbahaya bagi tubuh karena mengandung zat yang bersifat toksik, salah satunya formaldehida. Dampak formaldehida dapat dikurangi dengan antioksidan. Serbuk kurma mengandung flavonoid, vitamin c, dan vitamin e yang bersifat anti radikal bebas. Penelitian ini bertujuan untuk mengetahui pengaruh pemberian serbuk kurma terhadap histologi ginjal tikus putih yang dipaparkan pengharum ruangan.

**Metode :** Penelitian eksperimental murni *post test only control group design* dengan 32 ekor tikus putih yang dibagi menjadi 8 kelompok. Terdiri dari kelompok kontrol, dipaparkan pengharum ruangan 4 jam/hari, diinduksi serbuk kurma dengan dosis berbeda (120 mg/KgBB, 240 mg/KgBB dan 360 mg/KgBB), dipaparkan pengharum ruangan 4 jam/hari dan diinduksi serbuk kurma dengan dosis berbeda (120 mg/KgBB, 240 mg/KgBB dan 360 mg/KgBB). Seluruh kelompok diberi perlakuan selama 30 hari kemudian dibedah dan diambil organ ginjal. Pengamatan difokuskan pada diameter *corpusculum renale* dan ketebalan *space bowman* sebagai salah satu parameter kerusakan ginjal.

**Hasil :** Diameter *corpusculum renale* kelompok (C) tidak berbeda signifikan dengan kelompok (P),(K1),(K2),(K3) dan (PK1). Diameter *corpusculum renale* kelompok (C) berbeda signifikan dengan kelompok (PK2) dan (PK3). Ketebalan *space bowman* kelompok (C) berbeda signifikan dengan kelompok (P),(K2),(PK1),(PK2) dan (PK3). Ketebalan *space bowman* kelompok (C) tidak berbeda signifikan dengan kelompok (K1) dan (K3).

**Kesimpulan :** Serbuk kurma (*Phoenix dactylifera*) tidak berpengaruh terhadap histologi ginjal tikus putih (*Rattus norvegicus*) yang dipaparkan pengharum ruangan melalui pengamatan diameter *corpusculum renale* dan ketebalan *space bowman*.

**Kata kunci :** pengharum ruangan, serbuk kurma, diameter *corpusculum renale*, ketebalan *space bowman*.

## **ABSTRACT**

**Background :***The used of air fresheners harmful to the body caused contains substances that are toxic, one of them is formaldehyde. The impact of formaldehyde can be reduced by antioxidant. The date palm pollen containing flavonoid, vitamin c, and vitamin as antioxidant. This research aims to identify the influence of date palm pollen on histology kidney of albino rats exposed to air fresheners.*

**Method :***The research using post test only control group design on 32 rat, which were divided randomly into 8 groups. Group C, group P is exposed to air fresheners 4 hours/days, group 3, 4, and 5 was induced date palm pollen with different dose (120 mg/KgBW, 240 mg/KgBW, 360 mg/KgBW), group 6, 7, and 8 was exposed to air fresheners 4 hours/days and induced date palm pollen with different dose (120 mg/KgBW, 240 mg/KgBW, 360 mg/KgBW). Treatments were given for 30 days. At day 31 the rat were sacrificed, the kidney was collected and was utilized for histopathological focused on renale corpusculum diameter and thickness bowman's space as one of parameter kidney damage.*

**Results :***No significant statistical difference the diameter of corpusculum renale ( $p > 0,05$ ) between (C) and (P),(K1),(K2),(K3),(PK1). There was statistically significant differences in diameters of corpusculum renale between (C) and (PK2), (PK3). The thickness of bowman's space statistically significant different between (C) and (P),(K2),(PK1),(PK2), and (PK3) in the form of narrowing bowman's space that happens. No significant statistical difference between (C) and (K1), (K3).*

**Conclusion :***Administration of date palm pollen hadn't an effect to a histology kidney of rats (*Rattus norvegicus*) exposed to air fresheners through the observation of the diameter of corpusculum renale and the thickness of the space bowman.*

**Key words :***air fresheners, date palm pollen, diameters of corpusculum renale, thickness of bowman's space.*