

Lampiran 3. Data Analisis Ragam dengan Uji F

Perlakuan	Ulangan			Jumlah	Rata-rata
	1	2	3		
A	34	32	31	97	32,33
B	54	56	53	163	54,33
C	73	75	65	213	71,00
D	0	0	0	0	0
Jumlah	161	163	149	473	157,66
Rata-rata	40,25	40,75	37,25	118,25	39,415

ANALISIS RAGAM

Keterangan : (r = Perlakuan ; t = Ulangan)

$$\begin{aligned}
 \mathbf{FK} &= \frac{X^2}{r \cdot t} \\
 &= \frac{473^2}{4 \cdot 3} \\
 &= \frac{223729}{12} \\
 &= 18644,083
 \end{aligned}$$

$$\begin{aligned}
 \mathbf{JKP} &= \frac{(97)^2 + (163)^2 + (213)^2 + (0)^2}{t} - \mathbf{FK} \\
 &= \frac{9409 + 26569 + 45369 + 0}{3} - \mathbf{FK} \\
 &= 27115,666 - 18644,083 \\
 &= 8471,583
 \end{aligned}$$

$$\begin{aligned}
\mathbf{JKT} &= (34)^2 + (32)^2 + (31)^2 + (54)^2 + (56)^2 + (53)^2 + \\
&\quad (73)^2 + (75)^2 + (65)^2 + (0)^2 + (0)^2 + (0)^2 - \mathbf{FK} \\
&= 1156 + 1024 + 961 + 2916 + 3136 + 2809 + 5329 + \\
&\quad 5625 + 4225 + 0 + 0 + 0 - 18644,083 \\
&= 8536,917
\end{aligned}$$

$$\begin{aligned}
\mathbf{JKG} &= \mathbf{JKT} - \mathbf{JKP} \\
&= 8536,917 - 8471,583 \\
&= 65,334
\end{aligned}$$

$$\begin{aligned}
\mathbf{dBP} &= r - 1 \\
&= 4 - 1 = 3
\end{aligned}$$

$$\begin{aligned}
\mathbf{KTP} &= \frac{\mathbf{JKP}}{\mathbf{dBP}} \\
&= \frac{8471,583}{3} \\
&= 2823,861
\end{aligned}$$

$$\begin{aligned}
\mathbf{dBG} &= r. (t-1) \\
&= 4 . (3-1) = 8
\end{aligned}$$

$$\begin{aligned}
\mathbf{KTG} &= \frac{\mathbf{JKG}}{\mathbf{dBG}} \\
&= \frac{65,334}{8} \\
&= 8,166
\end{aligned}$$

$$\begin{aligned}
\mathbf{F. Hit} &= \frac{\mathbf{KTP}}{\mathbf{KTG}} \\
&= \frac{2823,861}{8,166}
\end{aligned}$$

$$= \frac{8,166}{345,807} \text{ (Dibulatkan menjadi 346)}$$

SK	db	JK	KT	F. Hitung	F. Tabel ($\alpha = 0,05$)
p	3	8471,583	2823,861	346	4,07
G	8	65,334	8,166		
T	11	8536,917			

Keterangan : Pada selang kepercayaan 95%, F hitung > F tabel menunjukkan pemaparan metil metsulfuron berpengaruh terhadap rasio anakan jantan *Daphnia* sp.