

Lampiran 6.**PERHITUNGAN PUPUK NPK****Kebutuhan Pupuk Tanaman Kacang hijau**

$$\text{Luas 1 Ha lahan} = 10.000 \text{ m}^2; \text{ LLE} = 85\% \times 10.000 \text{ m}^2 = 8.500 \text{ m}^2$$

$$\text{Luas 1 petak lahan} = 2 \text{ m} \times 3,2 \text{ m} = 6,4 \text{ m}^2$$

$$\text{Jumlah petak} = 27 \text{ petak}$$

$$1. \text{ Jumlah tanaman per petak dengan jarak tanam } 30 \text{ cm} \times 20 \text{ cm} = 106 \text{ tanaman}$$

$$\text{Jumlah kebutuhan biji} = 8.500 \text{ m}^2 : 0,06 \text{ m}^2 = 141.666 \text{ biji} \times 3 = 424.998 \text{ biji}$$

$$\text{Berat 100 biji} = 6,3 \text{ g}; 1 \text{ kg} = 16.000 \text{ biji}$$

$$\text{Jumlah kebutuhan biji per ha} = 424.998 : 16.000 = 26,7 \text{ kg ha}^{-1}$$

$$2. \text{ Jumlah tanaman per petak dengan jarak tanam } 20 \text{ cm} \times 20 \text{ cm} = 160 \text{ tanaman}$$

$$\text{Jumlah kebutuhan biji} = 8.500 \text{ m}^2 : 0,04 \text{ m}^2 = 212.500 \text{ biji} \times 3 = 637.500 \text{ biji}$$

$$\text{Berat 100 biji} = 6,3 \text{ g}; 1 \text{ kg} = 16.000 \text{ biji}$$

$$\text{Jumlah kebutuhan biji per ha} = 637.500 : 16.000 = 40,2 \text{ kg ha}^{-1}$$

$$3. \text{ Jumlah tanaman per petak dengan jarak tanam } 25 \text{ cm} \times 15 \text{ cm} = 170 \text{ tanaman}$$

$$\text{Jumlah kebutuhan biji} = 8.500 \text{ m}^2 : 0,0375 \text{ m}^2 = 226.666 \text{ biji} \times 3 = 679.998 \text{ biji}$$

$$\text{Berat 100 biji} = 6,3 \text{ g}; 1 \text{ kg} = 16.000 \text{ biji}$$

$$\text{Jumlah kebutuhan biji per ha} = 679.998 : 16.000 = 42,8 \text{ kg ha}^{-1}$$

Perhitungan kebutuhan pupuk :

1. Pupuk Urea :

Jarak tanam 30 cm x 20 cm

$$6,4 \text{ m}^2$$

$$\text{Kebutuhan pupuk Urea (50 kg urea/ha)} = \frac{6,4 \text{ m}^2}{10.000 \text{ m}^2} \times 50 \text{ kg} = 0,032 \text{ kg / petak}$$

$$0,032$$

$$\text{Kebutuhan pupuk / tanaman} = \frac{0,032}{106} = 0,00030 \text{ kg / tanaman}$$

$$= 0,30 \text{ g / tanaman}$$

Jarak tanam 20 cm x 20 cm

$$\text{Kebutuhan pupuk Urea (50 kg urea/ha)} = \frac{6,4 \text{ m}^2}{10.000 \text{ m}^2} \times 50 \text{ kg} = 0,032 \text{ kg / petak}$$

$$\text{Kebutuhan pupuk / tanaman} = \frac{0,032}{160} = 0,0002 \text{ kg / tanaman}$$

$$= 0,2 \text{ g / tanaman}$$

Jarak tanam 25 cm x 15 cm

$$\text{Kebutuhan pupuk Urea (50 kg urea/ha)} = \frac{6,4 \text{ m}^2}{10.000 \text{ m}^2} \times 50 \text{ kg} = 0,032 \text{ kg / petak}$$

$$\text{Kebutuhan pupuk / tanaman} = \frac{0,032}{170} = 0,00019 \text{ kg / tanaman}$$

$$= 0,19 \text{ g / tanaman}$$

2. Pupuk SP 18 :**Jarak tanam 30 cm x 20 cm**

$$\text{Kebutuhan pupuk SP 18 (150 kg SP 18/ha)} = \frac{6,4 \text{ m}^2}{10.000 \text{ m}^2} \times 150 \text{ kg} = 0,096 \text{ kg / petak}$$

$$\text{Kebutuhan pupuk / tanaman} = \frac{0,096}{106} = 0,00091 \text{ kg / tanaman}$$

$$= 0,91 \text{ g / tanaman}$$

Jarak tanam 20 cm x 20 cm

$$\text{Kebutuhan pupuk SP 18 (200 kg SP 18/ha)} = \frac{6,4 \text{ m}^2}{10.000 \text{ m}^2} \times 150 \text{ kg} = 0,096 \text{ kg/petak}$$

$$\begin{aligned} \text{Kebutuhan pupuk / tanaman} &= \frac{0,096}{160} = 0,0006 \text{ kg / tanaman} \\ &= 0,6 \text{ g / tanaman} \end{aligned}$$

Jarak tanam 25 cm x 15 cm

$$\text{Kebutuhan pupuk SP 18 (200 kg SP 18/ha)} = \frac{6,4 \text{ m}^2}{10.000 \text{ m}^2} \times 150 \text{ kg} = 0,096 \text{ kg/petak}$$

$$\begin{aligned} \text{Kebutuhan pupuk / tanaman} &= \frac{0,096}{170} = 0,00056 \text{ kg / tanaman} \\ &= 0,56 \text{ g / tanaman} \end{aligned}$$

3. Pupuk KCl

Jarak tanam 30 cm x 20 cm

$$\text{Kebutuhan pupuk KCl (50 kg KCl / ha)} = \frac{6,4 \text{ m}^2}{10.000 \text{ m}^2} \times 50 \text{ kg} = 0,032 \text{ kg / petak}$$

$$\begin{aligned} \text{Kebutuhan pupuk / tanaman} &= \frac{0,032}{106} = 0,00030 \text{ kg / tanaman} \\ &= 0,30 \text{ g / tanaman} \end{aligned}$$

Jarak tanam 20 cm x 20 cm

$$6,4 \text{ m}^2$$

$$\text{Kebutuhan pupuk KCl (50 kg KCl / ha)} = \frac{\quad}{10.000 \text{ m}^2} \times 50 \text{ kg} = 0,032 \text{ kg / petak}$$

$$\text{Kebutuhan pupuk / tanaman} = \frac{0,032}{160} = 0,0002 \text{ kg / tanaman}$$

$$= 0,2 \text{ g / tanaman}$$

Jarak tanam 25 cm x 15 cm

$$6,4 \text{ m}^2$$

$$\text{Kebutuhan pupuk KCl (50 kg KCl / ha)} = \frac{\quad}{10.000 \text{ m}^2} \times 50 \text{ kg} = 0,032 \text{ kg / petak}$$

$$\text{Kebutuhan pupuk / tanaman} = \frac{0,032}{170} = 0,00019 \text{ kg / tanaman}$$

$$= 0,19 \text{ g / tanaman}$$

PERHITUNGAN KEBUTUHAN MULSA

1. Kebutuhan mulsa jerami:

Ketebalan mulsa 6 cm per 1 m^2 membutuhkan $1 \text{ kg} / \text{m}^2$

Luas petak = $2 \text{ m} \times 3,2 \text{ m} = 6,4 \text{ m}^2$

Kebutuhan mulsa per petak = $1 \text{ kg} / \text{m}^2 \times 6,4 \text{ m}^2 = 6,4 \text{ kg}$

Kebutuhan jerami = $6,4 \text{ kg} \times 9 \text{ petak} = 57,6 \text{ kg}$

Kebutuhan mulsa per hektar = $1 \text{ kg} / \text{m}^2 \times 8500 \text{ m}^2 = 8500 \text{ kg m}^{-2} = 8,5 \text{ ton ha}^{-1}$

2. Kebutuhan mulsa sekam

Ketebalan mulsa 1 cm/m^2 membutuhkan = $0,35 \text{ kg} / \text{m}^2$

Luas petak = $2 \text{ m} \times 3,2 \text{ m} = 6,4 \text{ m}^2$

Kebutuhan mulsa per petak

Kebutuhan mulsa 6 cm per petak = $6 \times 0,35 \text{ kg m}^{-2} \times 6,4 \text{ m}^2$
= $13,44 \text{ kg}$

Kebutuhan sekam = $13,44 \text{ kg} \times 9 \text{ petak} = 120,96 \text{ kg}$

Kebutuhan mulsa per hektar = $6 \times 0,35 \text{ kg m}^{-2} \times 8500 \text{ m}^2$
= $2,1 \text{ kg m}^{-2} \times 8500 \text{ m}^2$
= $17850 \text{ kg m}^{-2} = 17,85 \text{ ton ha}^{-1}$