

The Effect of Differential Fertilization upon Golden Delicious Apples Production on Typical Chernozem Argic Soil

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Key words: apples, Golden Delicious, chernozem argic, fertilization.

SUMMARY

The chemical fertilizers are essential to obtain higher crops, they are used exclusively for quantitative increase fruit production per unit area. At the experience we use nine types of fertilization: control, 20 t / ha annually manure, 20t/ha year manure+N₆₀P₆₀K₆₀ kg DM/ha; N₁₀₀P₈₀K₁₀₀ kg DM/ha; N₁₂₀P₁₀₀K₁₂₀ kg DM/ha; N₆₀P₆₀K₆₀+leaf fertilizer; N₁₀₀P₈₀K₁₀₀+leaf fertilizer; N₁₂₀ P₁₀₀ K₁₂₀+leaf fertilizer, N₁₀₀ P₈₀ K₁₀₀+40 t / ha manure to three years. On *Golden Delicious* variety in variant N₁₂₀P₁₀₀K₁₂₀+leaf fertilizer (Agrofid N₁₄:P₁₄:K₂₈) was obtained 27.92 t/ha, the difference is very significant from the control (9.67t/ha), the variant N₁₀₀ P₈₀ K₁₀₀+40t/ha manure to three years was obtained 28.46 t/ha, the difference is more significant from the control (10.20t/ha), (Tab. 1).

Tab. 1

Production results obtained by the effect of differentiated fertilization from Apple,
 the *Golden Delicious* variety (2009)

| No. | Variation fertilization | Average yield of apple | | | | |
|-----|---|------------------------|-----------------|----------------------|--------------------------------|----------------|
| | | Production t / ha | Production % | Difference t / ha | Significan ce difference | Test Duncan |
| 1. | Control | 18,26 | 100,0 | 0,00 | martor | A |
| 2. | 20 t/ha manure | 18,67 | 102,2 | 0,41 | ** | B |
| 3. | 20 t/ha manure + N ₆₀ P ₆₀ K ₆₀ kg. DM/ha | 24,98 | 136,8 | 6,72 | *** | C |
| 4. | N ₁₀₀ P ₈₀ K ₁₀₀ kg. DM/ha | 19,66 | 107,7 | 1,,41 | *** | D |
| 5. | N ₁₂₀ P ₁₀₀ K ₁₂₀ kg. DM/ha | 27,17 | 148,8 | 8,91 | *** | D |
| 6. | N ₆₀ P ₆₀ K ₆₀ + leaf fertilizer | 25,19 | 138,0 | 6,93 | *** | E |
| 7. | N ₁₀₀ P ₈₀ K ₁₀₀ + leaf fertilizer | 26,61 | 145,7 | 8,35 | *** | F |
| 8. | N ₁₂₀ P ₁₀₀ K ₁₂₀ + leaf fertilizer | 27,92 | 153,0 | 9,67 | *** | G |
| 9. | N ₁₀₀ P ₈₀ K ₁₀₀ + 40t/ha manure at 3years | 28,46 | 155,9 | 10,20 | *** | H |

DL (p 5%) 0.22, DL (p 1%) 0.31, DL (p 0.1%) 1.43

REFERENCES

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