



Agricultural Journals

Research in

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Res. Agr. Eng.

**J. Hůla, P. Kovaříček,
V. Mayer**

Exploitational

indicators, Diesel fuel consumption and work quality during disc tiller skimming

Res. Agr. Eng., 49 (2003): 85-90

During the shallow soil tillage after winter wheat harvest the tractor JOHN DEERE 8200 with disc tillage implement DOWLANDS 4500 operation was monitored. For dependence of the set field speed within plots acreage the function of type $y = 0.43 \ln x + 10.76$ was chosen. Average Diesel fuel consumption at first skimming on plots of total acreage 611.4 ha was 7.98 l/ha, for evaluation of Diesel fuel consumption dependence on particular plots acreage was chosen a logarithmic model of function $y = -0.81 \ln x + 10.35$. For the engine Diesel fuel consumption dependence on average length of working drives through the plots the logarithmic model of function $y = -1.83 \ln x + 18.95$ was chosen. After first skimming by disc tiller on the soil surface has remained 31.1 wt % of winter wheat post-harvest remainders, in depth of 0– 50 mm was found-out of 31.0% of post-harvest remainders, 37.9 wt % of crop remainders was found-out in depth of 50– 100 mm. After the second skimming by the blade tiller most of the post-harvest remainders was worked-in to the depth of 50– 100 mm (54