

BALANCE OF POWER CLINDAMICINA BRUSH IN INTERACTION WITH SOIL

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Abstract. *This paper considers the balance of power of cylindrical brush with vertical axis of rotation during the disclosure of the mother plants root system. Analyzed two variants of brushes with different ways of placing the pile on the surface – singly or in bunches. Determined the efficiency of brushes according to the way of pile placement. It is established that the power during work of the brush is spent on the brush friction, pile deformation, separation of the soil particles and their rejection. The graphic analysis of both components and the overall value of power, required to drive the brush, is made, considering the options of pile placement on the brush surface and kinematic parameters of their work - the speed of the unit and the circular speed of the brush, which also depends on the way of pile placement. The analysis of balance of the power according to the soil type is done as well, especially its density, which covers the root system of mother plants.*

Key words: *pile, rod, beam, power, ground, performance*