

## IS RAKING TOO EXPENSIVE? RA-RAKE IS THE MOST EFFICIENT RAKE, ACCORDING TO TESTS BY THE UNIVERSITY OF MILAN

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Researchers at the Agriculture Dept. calculate the savings achieved thanks to the new double-wheel rake, presented at EIMA 2018.

Excellent forage at low costs? Today you can. Raking is a critical phase if you want to obtain high quality forage and breed healthy and productive cows. But to do so, until today you had to carry rather high costs: merger rakes are usually expensive and sidebar rakes are not available with very large working widths.

Today it is possible to combine quality and savings thanks to the revolutionary Ra-Rake, a double-wheel rake, with which in 2017 Repossi Macchine Agricole obtained a prestigious Horizon 2020 funding (set by the European Union to promote and support innovation, research and technological development).



Gabriele Repossi, inventor of the new machinery, had the brilliant idea of equipping it with two wheels of different diameters: the larger one does not touch the forage, but only has the task of moving the second wheel, which is smaller and moves the forage without polluting it with stones and soil. Since the rake does not need complex and expensive mechanisms to move the smaller wheel, it benefits from reduced costs (both for

purchase and maintenance) and allows it to operate at high speed.

The Department of Environmental Sciences and Policies of the University of Milan, in charge of assessing the advantages obtainable from Ra-Rake - using internationally recognised methodologies, has carried out preliminary assessments on a prototype of the rake, which will be on sale in May 2019. Here are the first results:

		Yearly worl	king area 400	600	800	1000	1200	1400	1600	1800	2000	"In comparative tests, we have calculated that those who work about 200
Rotary	€/ha	23.96	15.64	12.93	11.60	10.84	10.34	10.00	9.77	9.67	9.58	hectares per year (in the case of alfalfa, 5 cuts for
Ra-Rake	€/ha	17.08	10.12	7.82	6.68	6.00	5.55	5.23	5.00	4.82	4.68	an area of 40 hectares), if they
Sidebar	€/ha	21.20	13.74	11.31	10.13	9.44	9.00	8.69	8.49	8.40	8.31	use Ra-Rake instead of the
Merger	€/ha	63.26	33.98	24.30	19.51	16.66	14.79	13.47	12.49	11.74	11.15	rotary can save about €1400 per year, "says

Jacopo Bacenetti, researcher at the University of Milan, "and on a larger area (1000 hectares worked per year) the savings are  $\notin$ 4900, while on 2000 hectares is as high as  $\notin$ 9800".

Even with regard to the merger rake, used mainly on large areas, Ra-Rake demonstrates its positive economic impact, since it saves around €13000 per year.

The cost per hectare has been calculated by adding all the costs related to the machinery: the initial investment, the hourly costs of the operator and the out-of-pocket expenses for use and maintenance (diesel, oil and lubricant). Excellent news for cows' happiness and the farmers' wallet!

## Source: LECTURA Press