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Abstract

«Economic impact of peat moss in North America: The cost of eliminating peat moss usage.»

Peat moss has unique water retention properties and organic structure that make it an excellent substrate to grow various products. However, the environmental footprint of peat is a subject of controversy, to the point that some groups are lobbying for its removal. However, one can assume that if peat moss is being used it is because it has some advantages over substitutes, when they exist. This implies that the elimination of peat moss within the horticulture supply chain will have a cost on which little information is available. Thus, the objective of this paper is to estimate the cost of eliminating peat moss in North America horticulture industry.

A three steps methodological approach has been developed. Step 1-Assess the economic impact of peat usage in North America by using sales value of all products that use peat moss as well as retail sales of peat moss and use these data to run an intersectorial model. Preliminary results indicate that peat moss usage direct and indirect contribution to North America economy is 22.7 billion Canadian dollars¹. Step 2-Using secondary data, the literature and an international panel of industry and academic experts through the Delphi technique, estimate the maximum level of substitution for peat moss based on availability, cost differential, capacity to increase supply, environmental footprint and yield differentials. This step will result in the maximum dollar value of substitution. Step 3-By subtracting Step 2 values from Step 1 values, one obtains the values associated with the usage of peat moss that cannot be substituted without negative effects, transposed in dollars. This value is then run into the intersectorial model to obtain the cost of eliminating peat moss usage in North America.

This paper will contribute to a better understanding of the economic impact of peat moss as well as information on how economically substitutable it is. Moreover, it will give additional information to stakeholders as well as decision makers.

¹ Total GDP of Canada and the United States was 23,164 billion dollars in 2019. The combined direct and indirect economic contribution of all products that uses peat moss is therefore slightly less than 1% of North America GDP.