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# Determination of carbohydrates in tobacco by pressurized liquid extraction combined with a novel ultrasound-assisted dispersive liquid-liquid microextraction method

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## Graphical abstract

## Highlights

- PLE with UA-DLLME applied for the first time to extract carbohydrates.
- Different derivatization methods were properly compared.
- A new catalyst was used for the preparation of aldononitrile acetates.
- Experimental designs, FFD and DD were used to optimize the UA-DLLME.
- The proposed method is a green, simple, and efficient method.

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