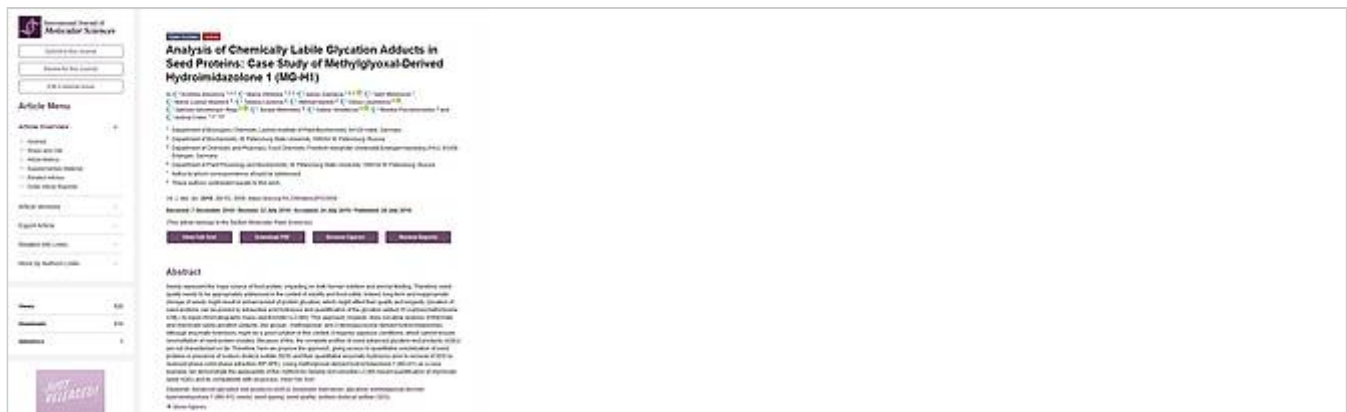


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## +++ News Ticker Science #23 +++ Analytical Methods +++



### Analysis of chemically labile glycation adducts in seed proteins.

IPB and Russian scientists developed a progressive method for the quantification of chemically labile advanced glycation end products (AGEs). Increased glycation of seed proteins might occur during inappropriate storage of seeds and constitutes negative effects on food quality. In contrast to a previous standard approach, the researchers succeeded in including chemically and thermally labile glycation adducts in the quantification approach by using enzymatic hydrolysis instead of acid hydrolysis and high temperatures, which enables the characterization of complete seed AGE profiles. This catalysis, however requires aqueous conditions, which cannot ensure reconstitution of the protein isolates. The chemists addressed this issue by incorporating the detergent sodium dodecyl sulfate (SDS) in the protocol, performing enzymatic hydrolysis and removing SDS using reversed phase solid phase extraction. They demonstrated the applicability of this method by reliable and sensitive liquid chromatography-mass spectrometry-based quantification, using a chemically labile AGE as a case study. The protocol can also be combined with biological assays.

### Reference:

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