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A small scale *in vitro* system for high throughput gas production analysis  
– a comparison with the Hohenheim gas test

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#### Highlights

- Automated *in vitro* system (micro gas system) on basis of the Hohenheim gas test
- System is small in space and time saving
- 12 feeds were tested simultaneously in both systems
- Strong accordance between the 24h gas production of the micro gas system and the Hohenheim gas test

#### ABSTRACT

An automated small scale *in vitro* system has been developed for the extensive examination of feedstuffs in high throughput screenings. This system was calibrated against the strictly standardized Hohenheim gas test (HGT). The automated system is suitable for gas-producing biological suspensions, e.g. ruminal fluid. Gas production is indirectly measured through pressure increase as a measure for digestibility. For functional characterisation of the micro gas system (MGS), a total number of 18 feedstuffs, including

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