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Effect of feed characteristics and operational conditions on treatment of dairy farm wastewater in a coupled anoxic-upflow and aerobic system

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Highlights

- Synthetic and real dairy farm wastewater treatment compared in hybrid upflow system.
- Analogous performance with both feeds at varied internal recycle ratios (R) and SRTs.
- Consistently higher nitrification and COD removal, drop in denitrification at $R > 3$.
- Lower kinetic rates, biomass yield and higher inert fraction with real dairy feed.
- Optimum performance at $R=3$ and higher kinetic rates at SRT of 30-40 days.

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