

Kemampuan antifungi *Lactobacillus plantarum* terhadap kapang yang tumbuh pada silase = Anti-fungi of *Lactobacillus plantarum* against moulds in silage

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Abstrak

Sebanyak enam strain *Lactobacillus plantarum* diteliti untuk menguji kemampuan antifungi terhadap kapang yang tumbuh pada silase. Suspensi sel *L. plantarum* strain DSK3, DR162, dan DP142 yang diisolasi dari dadih, strain 1A2 diisolasi dari tapai, strain TSD10 diisolasi dari kotoran sapi dan strain 1BL2 diisolasi dari buah strawberi memiliki kemampuan antifungi terhadap *Aspergillus fumigatus*, *Aspergillus* sp., *Penicillium* sp.(1), dan *Penicillium* sp.(2), namun tidak memiliki kemampuan antifungi terhadap jamur merah dan jamur putih dengan metode double layer agar well diffusion. Supernatan *L. plantarum* yang diendapkan dengan ammonium sulfat 60% pada pengujian paper disc assay menunjukkan kemampuan antifungi pada *L. plantarum* strain DSK3, 1A2, DR162, TSD10, dan 1BL2 terhadap *A. fumigatus*, namun tidak menunjukkan kemampuan antifungi terhadap *Aspergillus* sp., *Penicillium* sp.(1), dan *Penicillium* sp.(2). Suspensi sel semua strain *L. plantarum* menghasilkan zona hambat total terhadap *A. fumigatus*, *Aspergillus* sp., *Penicillium* sp.(2) dan zona hambat parsial terhadap *Penicillium* sp.(1). Ekstrak supernatan *L. plantarum* strain DSK3, 1A2, DR162, TSD10, dan 1BL2 menghasilkan zona hambat parsial terhadap *A. fumigatus*.
.....Six strains of *Lactobacillus plantarum* were assayed to detect anti-fungi against moulds in silage. Cell suspension of *L. plantarum* strains DSK3, DR162, and DP142 which were isolated from dadih, strain 1A2 isolated from tapai, strain TSD10 isolated from dung and strain 1BL2 isolated from strawberry showed anti-fungi against *A. fumigatus*, *Aspergillus* sp., *Penicillium* sp.(1), *Penicillium* sp.(2), but there was no anti-fungi against red and white moulds in double layer agar well diffusion method. Supernatant of *L. plantarum* was precipitated with 60% ammonium sulfate. Supernatant extract of *L. plantarum* strain DSK3, 1A2, DR162, TSD10, and 1BL2, assayed with paper disc method, showed anti-fungi against *A. fumigatus*. There was no anti-fungi against *Aspergillus* sp., *Penicillium* sp.(1) and *Penicillium* sp.(2). Cell suspension of *L. plantarum* produced a total inhibition zone of *A. fumigatus*, *Aspergillus* sp., *Penicillium* sp.(2) and a partial inhibition zone of *Penicillium* sp.(1), whereas the supernatant extract of *L. plantarum* produced partial inhibition zone of *A. fumigatus*.