

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

Aulia Fauziah, author

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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 amonium 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*.