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軽微なナミダタケ腐朽材における 表面処理用木材保存剤の効果

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Effect of a Wood Preservative Used as a Surface Treatment on Slightly-Decayed Wood Caused by *Serpula lacrymans*

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To establish methods of on-site preservative treatment of decayed wood, we investigated the effects of a wood preservative used as a surface treatment on slightly-decayed wood caused by *Serpula lacrymans* using Yezo spruce (*Picea jezoensis*) sapwood specimens measuring 2 (T) x 2 (R) x 4 (L) cm. After 2-8 weeks of exposure to *S. lacrymans*, fungal mycelium was removed from one specimen group; and fungus was left on the surface of the other specimen group. Both groups were then dipped in SF1083 (an oil-borne wood preservative containing a combination of organic iodine and an azole compound), and the subsequent efficacy of the surface treatment against *S. lacrymans* was evaluated by mass loss of the specimens. The mass loss in specimens with mycelium either removed or not removed was strongly suppressed by the surface treatment. In a second trial, 2 specimens of Yezo spruce sapwood measuring 2 (T) x 2 (R) x 1 (L) cm were exposed to *S. lacrymans* in a culture bottle for 2 weeks. One specimen had SF1083 dripped on it, while the other was left untreated. The specimens were then exposed to *S. lacrymans* for a further 10 weeks, after which mass-loss percentages since treatment were measured. There was no mass loss in the specimens treated with SF1083, which was also suppressed in the specimens that were left untreated. From these results, it was determined that surface treatment of wood with SF1083 in the early stages of decay due to *S. lacrymans* suppressed progression of the decay on both treated portions and areas surrounding them.

Key words: *Serpula lacrymans*, surface treatment, oil-borne wood preservative, subsequent treatment
ナミダタケ, 表面処理, 油溶性木材保存剤, 二次処理

ナミダタケ腐朽材に対する現場処理方法を確立するために, 軽微なナミダタケ (*Serpula lacrymans*) 腐朽材における表面処理用木材保存剤の効果調べた。ナミダタケを培養したビン内でエゾマツ (*Picea jezoensis*) 辺材 (2 (T) x 2 (R) x 4 (L) cm) を2 ~ 8週間強制的に腐朽させた

後、木材表面の菌体を除去して、あるいは除去せずに有機ヨウ素・アゾール化合物系の油溶性木材保存剤(SF1083)に浸せき処理した。これらの試験体をナミダタケあるいはポテトデキストロース寒天培地上に12週間設置した後に質量減少率を測定し、ナミダタケに対する防腐効力を評価した。その結果、菌体除去の有無に関わらず薬剤処理により質量減少は強く抑制された。また、2個のエゾマツ辺材(2(T)×2(R)×1(L)cm)を同じ培養ビン内でナミダタケにより2週間強制的に腐朽させ、一方の試験体にSF1083を滴下してさらに10週間設置した後の質量減少率を測定した。その結果、SF1083を滴下した試験体では質量の減少は認められず、もう一方の滴下していない試験体においても質量減少が抑えられた。このことからナミダタケにより軽度に腐朽した木材に対する薬剤処理は、処理部分および処理部周辺の薬剤未浸透部分に存在するナミダタケの腐朽力を低下させ、腐朽の進行を抑制できることがわかった。

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