

Studi interaksi strain nostoc cpg24 dengan akar tanaman padi oryza sativa 1 varietas Ciherang melalui sistem penanaman hidroponik = Interaction study of nostoc strain cpg24 with roots of rice oryza sativa 1 variety Ciherang using hydroponic planting system

Deti Purwanti, author

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Abstrak

Penelitian dilakukan untuk mengetahui interaksi yang terjadi antara strain Nostoc CPG24 dan akar tanaman padi varietas Ciherang yang ditanam menggunakan sistem hidroponik. Rumpun padi usia 14 hari (1 rumpun terdiri atas 3 tanaman padi) diko-kultivasi pada tabung reaksi berisi medium cair BG11 N-free konsentrat 10 x yang diberi aerasi. Pemeliharaan tanaman padi dilakukan dalam ruangan dengan 12 jam siklus terang-gelap selama 14 hari. Perlakuan yang diberikan terdiri atas pemberian strain Nostoc CPG24 0,4 g (P1), IAA 15 ppm (K+), strain Nostoc CPG24 0,4 g + IAA 15 ppm (P2), dan kontrol negatif (K-). Hasil penelitian menunjukkan ada interaksi antara strain Nostoc CPG24 dan akar tanaman padi berupa penempelan strain Nostoc CPG24 pada keseluruhan bagian akar, pembentukan dan pemanjangan akar lateral serta rambut akar.The aim of the study was to observe the interaction between Nostoc strain CPG24 and roots of Ciherang rice. A bunch of 14-day-old rice seedlings (3 seedlings were wrapped to make 1 bunch) were co-cultivated on aerated BG11 N-free liquid medium 10x concentrate in the test tube. The plants were grown in the room with a 12 hours light-dark cycle for 14 days. The treatments were applied by giving Nostoc strain CPG24 0,4 g (P1), 15 ppm IAA (K+), Nostoc strain CPG24 0,4 g + 15 ppm IAA (P2). Nor Nostoc and IAA were given in negative control (K-). The result showed an interaction between Nostoc strain CPG24 and roots of rice in form of attachment of Nostoc strain CPG24 on the surface of the roots, also on formation and elongation part of lateral and hair roots.