

- B211** Effects of allelochemicals naturally occurring from *Artemisia princeps* var. *orientalis* on mycorrhizal fungi and plant growth

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The effects of the aqueous extracts of *Artemisia princeps* var. *orientalis* on mycorrhizal fungal colonization and plant growth of 3 species were studied. In general, root colonization by mycorrhizal fungi on roots of 3 species decreased with increasing the aqueous extract concentration. In general, the growth of mycorrhizal 3 species were inhibited by the aqueous extract and it was concentration-dependent. The growth difference between non-mycorrhizal and mycorrhizal plant was significant statistically.

- B301** Decolorization of tannery wastewater by white rot fungus, *Irpex lacteus*

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In this study, the decolorization of tannery wastewater by white rot fungus, *Irpex lacteus* was tested in various wastewater concentration, nitrogen concentration and inoculum size. In addition, the effects of oxygen flushing, inducer and cofactor were investigated. In general, the rate of the decolorization by *Irpex lacteus* was higher when the culture was shaken. The decolorizing patterns of the samples of 10 and 20% wastewater concentration in shaken culture were similar to pattern of the wastewater serially diluted. However, the decolorization is not detectable in the samples of wastewater concentration higher than 60%. According to increase of inoculum size, the decolorization was slightly increased. In cases of oxygen flushing, the transmittance at 425 nm and 525 nm was elevated to 5-8% in the static cultured samples of 20 and 30% wastewater concentration. The decolorization was done well in nitrogen limited condition (0.003% nitrogen concentration). In case of cofactor and inducer, the sample was changed to yellow color during incubation.