

Komórkowe aspekty regeneracji w kulturach protoplastów łąbinu żółtego (*Lupinus luteus* L.)

Alina Wiszniewska, Anna Pindel

Katedra Botaniki i Fizjologii Roślin, Wydział Ogrodniczy, Uniwersytet Rolniczy, Kraków

Cellular aspects of regeneration in protoplast culture of yellow lupin (*Lupinus luteus* L.)

Summary

Yellow lupin (*Lupinus luteus*), like many other *Fabaceae* species, exhibits strong recalcitrance to *in vitro* conditions of protoplast culture, where regeneration capacity is extremely limited, and only incipient mitoses are observed. In case of the restricted morphogenetic potential of yellow lupin protoplasts, special attention should be paid to the cellular mechanisms that control gaining of totipotency in culture. These are especially: the structure and functioning of new cell wall, elements of cytoskeleton, as well as some cell components of signaling properties. Detailed investigation on these structures and their behaviour in culture conditions may contribute to the understanding and bypassing of the recalcitrance problem in yellow lupin.

Key words:

yellow lupin, protoplasts, cell wall regeneration, cytoskeleton, arabinogalactan proteins

Adres do korespondencji:

Alina Wiszniewska, Katedra Botaniki i Fizjologii Roślin, Wydział Ogrodniczy, Uniwersytet Rolniczy, Al. 29 Listopada 54, 31-425 Kraków; e-mail: a.wiszniewska@ogr.ur.krakow.pl