Histochemical Study of Panax ginseng for Identification of Root's Age

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To identify the ages of ginseng roots is very important to the commercial market, and the study fields. However, any criterion has not been clearly established for knowing the ages yet. We studied to find a clear morphological key for identification of ginseng root's age using histochemistry. Fresh sections of 3, 4, 5, and 6 year-old roots were stained with Nile blue, and they were observed each other with a light microscope. The number of resin duct layer (RDL) is a useful key to confirm the age of ginseng root. Three year old root has two, four year old one has three, five year-old one has four, and six year old one has five RDLs on each cortex region of roots.

Keywords: Panax ginseng, resin duct, histochemistry