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研究论文

茶树解除休眠前后体内激素等物质变化及锌的积极影响

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摘要 为了探讨茶树解除休眠前后内源激素的变化及锌对此过程的作用，测定了成龄茶树休眠芽和顶端新梢核酸、可溶性蛋白、二种形态的脱落酸（ABA）含量及不同浓度锌处理苗体内吲哚乙酸（IAA）、赤霉素（GAs）和ABA含量。结果表明，茶树解除休眠前后ABA的形态明显不同，游离太代谢趋于活跃，蛋白质合成加速。锌处理促进GAs和IAA含量的增加，影响IAA和ABA在不同器官中的分配，有利于fABA转化，可能具有促进茶树解除休眠状态和延迟进入休眠状态的作用。

关键词 茶树,生理效应,内源激素,锌

分类号

The Physiological Changes during Release of Bud Dormancy and Effect of zinc on endogenous Hormons in Tea (Camellia sinensis L.)

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Abstract The level of nucleic acid, soluble protein and two states of abscisic acid (ABA) fo dormant buds and germinate shoot in mature tea plant were determined, and the content of indole-3-acetic acid(IAA), gibberellin 1,3,4,7(GAs)in tea (Camellia sinensis L.) seedlings cultured in different concentrations of Zinc were observed too. Results show that the states of ABA are different in dormant buds and new shoots, free ABA(fABA) and conjunct ABA(cABA) is mutually reversible, the higher of germinant degree is, the bigger of cABA/fABA get. Meanwhile the nucleic acid metablism tend towards active and the protein synthesis is enhanced. Zn increases the contents of GAs and IAA, influences the distribution of IAA and ABA in different organs and enhances the transformation from fABA to cABA. Results indicate that Zn seems to have an effect of quidkenning the release of dormancy or postponing the process of dormancy.

Key words Tea Physiological effects Endogenous hormones Zinc

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