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A Screen for Genetic Loci Required for Body-wall Muscle Development
During Embryogenesis in X-chromosome of *Caenorhabditis elegans*

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We have screened available chromosomal deficiencies for genetic loci whose zygotic expression is required for body-wall muscle cells during embryogenesis in *Caenorhabditis elegans*. In previous studies, it has been shown that no signs of muscle development were detected in nullo-X embryos during embryogenesis. Based on this observation, we are interested in identifying potential loci on X chromosome required for muscle development. Several chromosomal deficiency strains have been analyzed for their terminal phenotypes in order to map such myogenic loci on X chromosome. We have collected homozygotic embryos and observed the terminal phenotypes of the arrested embryos by Normarski microscopy. These homozygotic embryos will be stained with monoclonal antibodies against muscle specific myosins in order to assess their muscle formation.

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Genomic *in situ* Hybridization of parental genomes in
Lycoris flavescens M. Kim & S. Lee (Amaryllidaceae)

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Genomic *in situ* hybridization(GISH) was used to discriminate the parental genomes of the *Lycoris flavescens* M. Kim & S. Lee (2n=19, 3M+4T+11A+1sm), a naturally occurring hybrid between *L. sanguinea* var. *koreana* (2n=22, 22A) and *L. chinensis* (2n=16, 6M+8T+2sm). For identifying parental genomes in interspecific hybrid, biotinylated genomic DNA of *L. sanguinea* var. *koreana* or *L. chinensis* hybridized preferentially *in situ* to mitotic chromosomes of *L. flavescens* as a probe conjugated to fluoresceinated avidin. The allopolyploid of *L. flavescens* was showed by the homology between 11A chromosomes of *L. sanguinea* var. *koreana* and 3M+1sm+4T chromosomes of *L. chinensis*.