

Journal of Andrology, Vol 18, Issue 1 71-79, Copyright © 1997 by The American Society of Andrology

---

## JOURNAL ARTICLE

# Evaluation of the binding patterns of eleven FITC-conjugated lectins in Fischer 344 rat testes

R. N. Wine and R. E. Chapin

National Toxicology Program, National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina 27709, USA.

The binding patterns of 11 recently commercially available fluorescein isothiocyanate-conjugated lectins that have been uncharacterized or undercharacterized in rat testes and/or have an unknown or complex carbohydrate specificity were evaluated in paraffin sections from Fischer 344 rat testes. Several of the lectins exhibited unique binding patterns that provide information about changes in carbohydrate domains, particularly during germ-cell maturation, that occur during spermatogenesis. *Agaricus bisporus* (ABA) lectin produced the most striking staining pattern in the cytoplasm of maturing germ cells, increasing in intensity until spermatid elongation, while the nuclei remained negative. In contrast, *Cicer arietinum* (CPA) strongly stained the nucleus of early leptotene/zygotene spermatocytes, decreasing to moderate intensity during maturation, until staining was irregular and scattered in elongated spermatids. This study describes new patterns of lectin staining during spermatogenesis and provides additional evidence of the complex carbohydrate modifications that occur as germ cells mature within the seminiferous tubule.

### This Article

- ▶ [Full Text \(PDF\)](#)
- ▶ [Alert me when this article is cited](#)
- ▶ [Alert me if a correction is posted](#)

### Services

- ▶ [Similar articles in this journal](#)
- ▶ [Similar articles in PubMed](#)
- ▶ [Alert me to new issues of the journal](#)
- ▶ [Download to citation manager](#)

### Citing Articles

- ▶ [Citing Articles via Google Scholar](#)

### Google Scholar

- ▶ [Articles by Wine, R. N.](#)
- ▶ [Articles by Chapin, R. E.](#)
- ▶ [Search for Related Content](#)

### PubMed

- ▶ [PubMed Citation](#)
- ▶ [Articles by Wine, R. N.](#)
- ▶ [Articles by Chapin, R. E.](#)