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RECIPROCAL TRANSLOCATION IN *TRITICUM SPELTA*

SPONTANEOUS chromosomal interchanges have been observed between many wheat varieties (Baker and McIntosh[1], Riley, Coucoli and Chapman[3] and Kimber[2]). The chromosomes from the A genome and especially B genomes are much involved in these interchanges, while the D genome chromosomes are less involved. Some of these interchanges have been localised to specific chromosomes by means of crosses to monosomic or other aneuploid lines. Especially the Chinese Spring aneuploid lines have been used for this purpose.

The present report includes the crosses between Chinese Spring aneuploids and *Triticum spelta*, studied at Institute of Plant Breeding, University of Göttingen (W. Germany). F_1s of the disomic cross between the variety Chinese spring and *T. spelta* and most of the mono F_1s between Chinese Spring monosomics and *T. spelta* showed one ring or chain-shaped quadrivalent, or one trivalent and one univalent at metaphase I (Fig. 1). In these crosses no multivalents were expected as Riley *et al.*[3] have reported the primitive hexaploid chromosome structure in *T. aestivum*, ssp *spelta*, but these F_1s showed quadrivalents or trivalent and univalent in about 35% of the cells analysed. Since the variety Chinese Spring is considered the most primitive variety in respect to chromosome structure (Riley *et al.*[3]), the observations in the present study indicate the presence of reciprocal translocation in the chromosomes of *T. spelta*. However, the chromosomes involved in the translocation could not be identified.

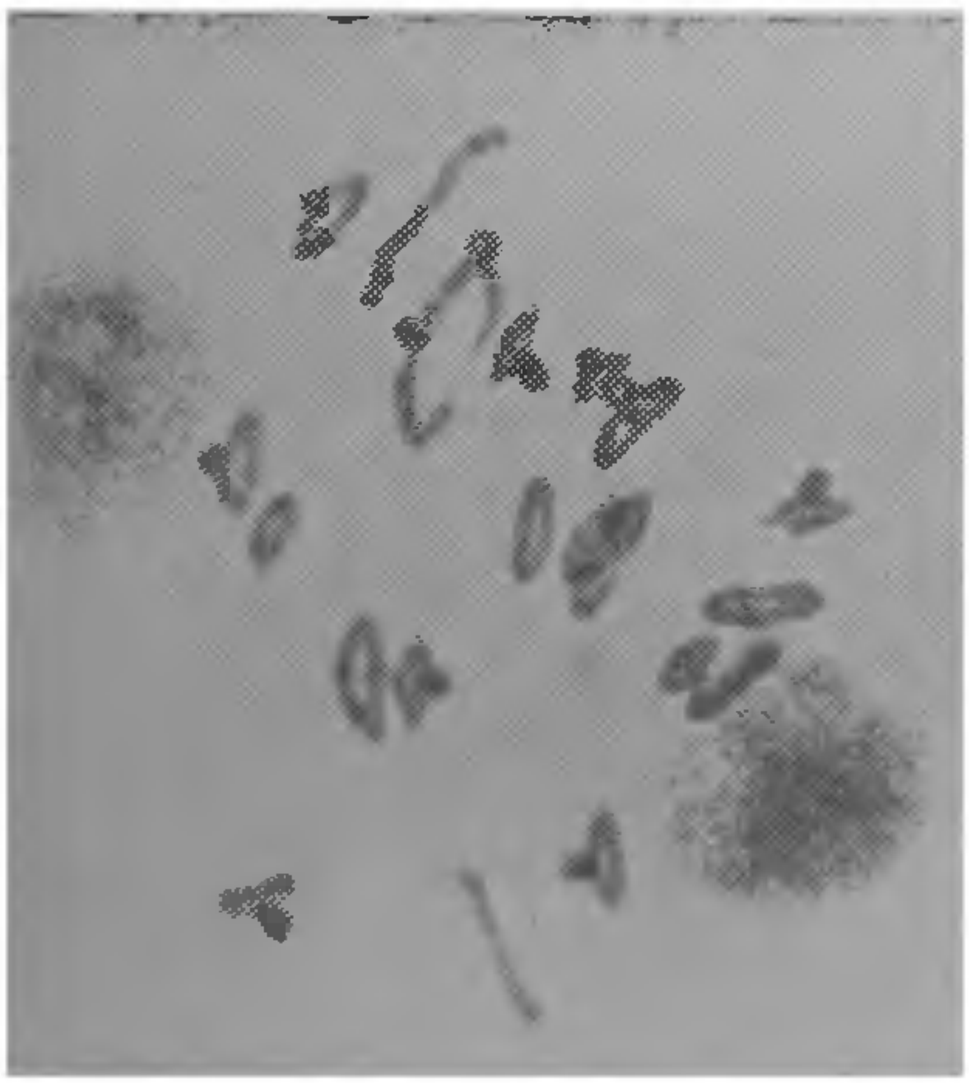

FIG. 1. Shows a ring shaped quadrivalent at metaphase I.

These types of spontaneous chromosomal translocations found in common wheat varieties may interfere in cytogenetic work since the localization of genes to specific chromosomes may be disturbed from such translocations.

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A NEW SPECIES OF *PERICONIELLA* FROM INDIA

DURING a survey of fungi of Gorakhpur region, the authors have collected an unusually large number of parasitic forms on various phanerogamic plants. Some of these have already been described[1]. In February, 1976 a leaf spotting dematiaceous hyphomycete was collected on *Litsea chinensis* Lamk. from Telkonia Range of Gorakhpur Forest Division (U.P.). The present communication describes this collection as *Periconiella longispora* sp. nov.

Periconiella longispora sp. nov. (Fig. 1 *a*, *b*, *c*)

Coloniae plerumque hypophyllae effusae, pilosae, brunneae vel atrofuscae; hyphae mycelicae semiimmersae hyalinae vel subhyalinae, septate, ramosae laeves, usque ad 4·5 μm diam.; conidiophora plerumque fasciculata, recta vel subflexuosa, valide, crassitunicata, brunnea, in stipem et capitem bene definitum ramos parves fertiles ferentem divisa; stipes usque ad 800 × 3·5–8·5 μm septatus glaber, ramis pallide olivaceis, plerumque 40–175 × 4·5–11·5 μm ad apices inflatus et pallidior, saepe in conidiophora secundaria et deinde tertiaria capite fertilia ferentia proliferans; cellulae conidiogenae integratae, terminales, polyblasticae, saepe cum ramis capitis conjungentia, symbodiales, cylindricae vel obclavatae vel irregulares, cicatricibus bene evolutis donata; conidia solitaria, sicca simplicia, aeropleurogena, anguste obclavata,

saepe curvata, transverse 3–20-septata, pallide olivacea vel olivaceo-brunneola, laevia, plus minusve crassi-tunicata, 36–130 (75) × 4·5–9·5 (7·5) μm.

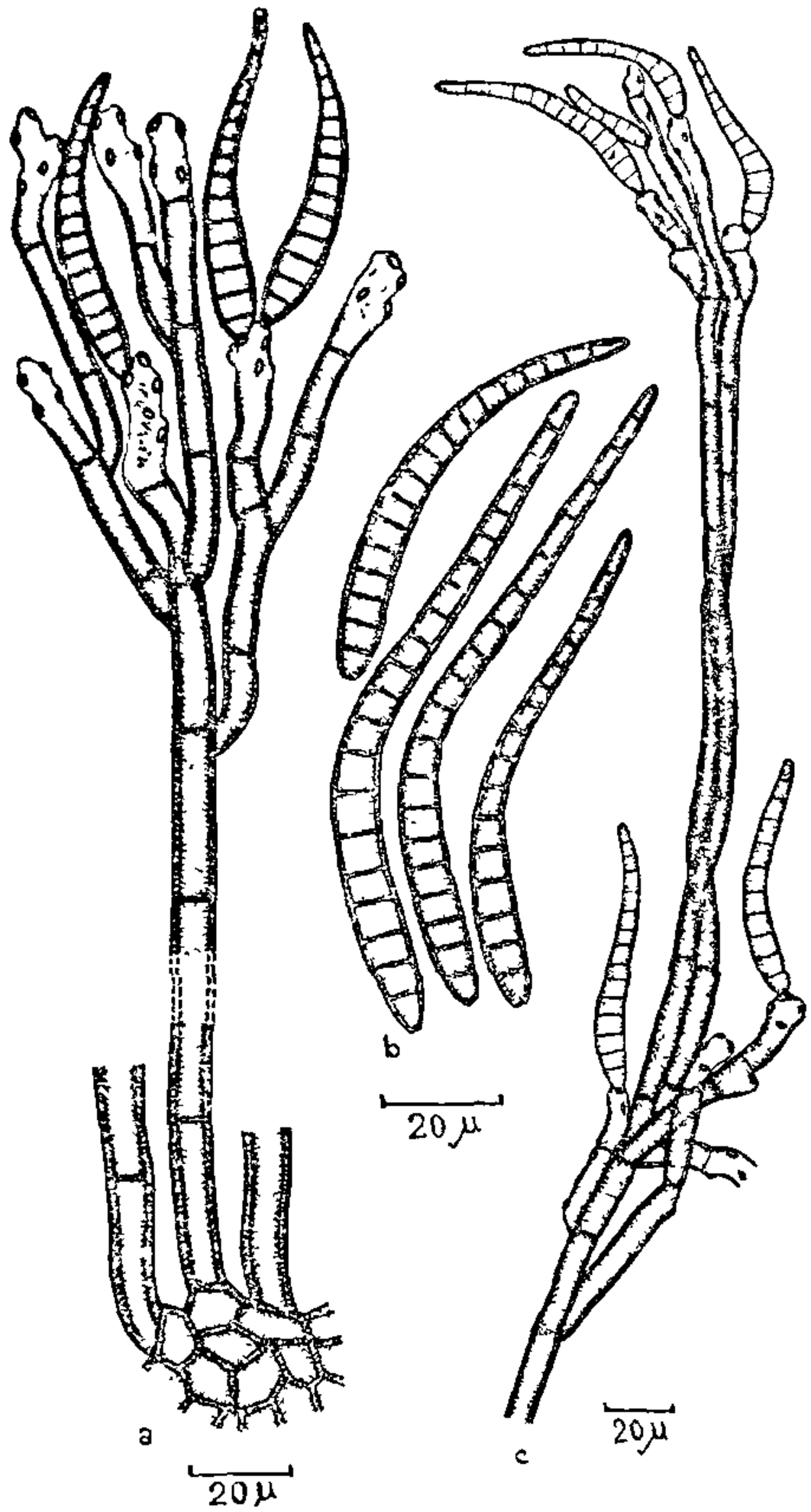

FIG. 1. *Periconiella longispara* sp. nov.
a, a conidiophore with stipe and head; *b*, conidia; *c*, a proliferating conidiophore.

In foliis vivis *Litseae chinensis* Lamk. leg. S. Singh, 118 typum, in herb. IMI sub numero 200061 conservatum.

One of the most important and distinguishing features of this collection is the formation of the longest conidia (36–130 × 4·5–9·5 μm) with an unusually large number of septa (3–20) among the species of the genus known so far. Further, this species does not resemble any of the known species of the genus *Periconiella* in occasional proliferation of the heads into secondary and tertiary stipes with more or less fertile heads.

This species resembles *Periconiella rapaneae* Ellis[2] described on *Rapaneae* sp., only in the shape of conidia. This resemblance, however, merits minor concern to prove the present fungus conspecific with *P. rapaneae*.

The unusually large size and the number of septa in the conidia and the occasional proliferation of the branches of primary heads into secondary and tertiary stipes bearing fertile heads in the present collection warrant its description as a new species.

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POLLINATION BIOLOGY OF *CALOTROPIS GIGANTEA* (L.) R BR.

SPECIES of *Xylocopa*, commonly known as carpenter bees have been recognised as active pollinators of *Calotropis gigantea*. Pijl[1] recorded that *Xylocopa latipes* was an established pollinator. Recently Wanntrop[2] has pointed out that *C. gigantea* is pollinated by several insects of which *Xylocopa tenuiscapa* appears to be the most efficient. The present study was taken up to understand the species of *Xylocopa* that are involved in the pllination of *C. gigantea* in two distant localities. The account is based on the observations made in several populations of *C. gigantea* growing around Kukkanahally tank near Manasagangotri, Mysore and near Srinivasapur, Kolar District.

Two insect species are noted to effect pollination of *C. gigantea*, in Kukkanahally tank area; they are *Xylocopa dissimilis* Lepel. (Figs. 1 to 3) and *Xylocopa collaris* Lepel. (Fig. 4) (Hymenoptera, Apidae). Both taxa are active between 0700 to 1700 hrs on bright sunny days. Species of *X. collaris* arrived in swarms while *X. dissimilis* visited individually and on several occasions it has been noted that *X. collaris* is a major pollinating agent of *C. gigantea*, near Kukkanahally tank area, while in Srinivasapur area *Xylocopa dissimilis* alone functioned as the pollinating agent.

The bee alights on a flower in a crouching position and its wings keep fluttering so long as it stays on the flower. With regard to *X. dissimilis*, the head of the