

CHROMOSOME NUMBERS IN SOME SOLANACEAE

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Recently I have had an opportunity to work on cytological material of several species of Solanaceae for which chromosome counts have not been reported. These are listed in Table 1 along with substantiating counts for some other species. In the case of *Solanum*, the respective section to which each species belongs is indicated in parenthesis. All reports are based upon at least two counts.

Buds were obtained from plants collected in the field (Florida, Mexico and South America) and both root-tips and buds from plants grown in the greenhouse. Meiotic figures were prepared with 1% aceto-carmin from buds fixed in Farmer's fixative. For root-tip smears the lacto-propionic orcein procedure used by Kawano (1965) was employed. The 2, 4 Dinitrophenol was omitted from Östergren and Heneen's fixative as these workers suggested (1962). The gametic and/or somatic number is reported depending upon the material(s) available and the method(s) employed. Voucher specimens of all plants have been deposited at the University of Wisconsin Herbarium, and duplicates of many will soon be distributed to other herbaria.

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REFERENCES

- KAWANO, S. 1965. Application of pectinase and cellulase in an orcein squash method. *Bot. Mag. Tokyo* 78(919):36-42.
- OSTERGREN, G. and HENEEN, W. K. 1962. A squash technique for chromosome morphological studies. *Hereditas* 48:332-341.

Table 1. Chromosome numbers in some Solanaceae

<u>Solanum</u>	<u>n</u>	<u>2n</u>	<u>Collector and/or source of material</u>
(<i>Brevantherum</i>) <i>abutiloides</i> (Griseb.) Bitt. & Lillio		24	seed from Argentina
(<i>Lycianthes</i>) <i>acutifolium</i> R. & P.		24	Iltis, et. al. 735, Curahuasi, Dept. Apurimac, Peru
(<i>Torvaria</i>) <i>asperolanatum</i> R. & P.	12	24	Iltis, et. al. 215, 5 km below Tarma, Dept. Junin, Peru
(<i>Micracantha</i>) <i>bahamense</i> L.	12		Roe 118, Long Key, Florida
(<i>Micracantha</i>) <i>blodgettii</i> Chapm.	12		Roe 119, Big Pine Key, Florida
(<i>Asterotrichotum</i>) <i>crinitipes</i> Dunal		24	Iltis 1624, Quito, Ecuador
(<i>Brevantherum</i>) <i>erianthum</i> D. Don	12		Roe 91, Dade Co., Florida
(<i>Brevantherum</i>) <i>hazenii</i> Britton	12		Mick & Roe 326, Isthmus of Tehuantepec, Edo. Oaxaca, Mexico
(<i>Micracantha</i>) <i>hirtum</i> Vahl	12		seed from Trinidad
(<i>Jasminosolanum</i>) <i>macrantherum</i> Dunal		24	Roe & Roe 1940, 5 km N Ixtapan, Edo. Mexico, Mexico
(<i>Asterotrichotum</i>) <i>mitlense</i> Dunal		24	Roe & Roe 1908a, 2 km N Ixtapan, Edo. Mexico, Mexico

<i>(Solanum syn. Morella) nodiflorum</i> Jacq.	24		<i>Iltis, et. al.</i> 388, Lima, Peru
<i>(Indubitaria) nutans</i> R. & P.	24		<i>Iltis & Ugent</i> 650b, NNW Abancay, Dept. Apurimac, Peru
<i>(Solanum syn. Morella) pallidum</i> Rusby	12		<i>Iltis & Ugent</i> 779, Ancahuasi, Dept. Cuzco, Peru
<i>(Melongena) quitoense</i> Lam.	24		Seed from Guayaquil, Ecuador
<i>(Jasminosolanum) radicans</i> L. f.	24		<i>Iltis, et. al.</i> 734, Curahuasi, Dept. Apurimac, Peru
<i>(Torvaria) saponaceum</i> Dunal	24	48	<i>Iltis, et. al.</i> 834, 33 km SW Abancay, Dept. Apurimac, Peru
<i>(Jasminosolanum) seaforthianum</i> Andr.	12		<i>Roe</i> 126, cultivated, Ft. Lauderdale, Florida
<i>(Micracantha) stramonifolium</i> Jacq.	12		Seed from Trinidad
<i>(Torvaria) torvum</i> Sw.	24		Seed from Cerro San Felipe, Edo. Oaxaca, Mexico
<i>(Brevantherum) umbellatum</i> Mill.	24		<i>Roe, Roe & Mori</i> 1356, 36 km S. Dzuiche, Q. Roo, Mexico
<i>(Micracanthes) wendlandii</i> Hook. f.	24		<i>Roe</i> 129, cultivated, Ft. Lauderdale, Florida
<i>Cyphomandra betacea</i> Sendtn.	12	24	Seed from Urubamba, Peru
<i>Cestrum flavescens</i> Greenman	8		<i>Iltis & Iltis</i> 1689, 2 km SSW La Cima, D. F., Mexico
<i>Saracha herrerae</i> Morton	12		<i>Iltis, et. al.</i> 972, 9 km SW Pisac, Dept. Cuzco, Peru