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# SCIENCE NEWS LETTER



®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



**Mutated Snapdragon**

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A SCIENCE SERVICE PUBLICATION

# Kodak reports to laboratories on:

making one's point vividly in a learned journal . . . some information we hope you'll use and some we hope you won't

## Cut-rate color

A beautiful photograph of *Castilleja linearifolia* in full color might have been printed in this space.

But this magazine doesn't print full color. It is too costly for the economic structure that supports the publication. One needs a set of four printing plates—magenta (known to printers as "red"), cyan (known to printers as "blue"), yellow, and black. Much costlier paper would be needed, and it must go through a press four times under most exacting conditions of register and inking.

A certain national wildflower society we know has a beautiful color transparency of *Castilleja linearifolia* to reproduce in its bulletin, but such an expenditure would immediately chew up its publication budget. The figures have scared off many other societies and publishers of periodicals and books aimed at smallish audiences.

Very well, we have devised a cut-rate color printing method. It is intended for press runs of not much more than 2500 copies. It dispenses with the black plate, depending on overprinted heavy inking for rendering dark areas. It permits none of the laborious hand work that's back of the exquisite effects achieved in some color advertisements and none of the color correction by electronic computing circuitry, used for editorial color illustrations in some mass magazines. It would hold down the soaring flight of an advertising art director's creative imagination.

But, by George, it's color printing, and it might be just the ticket for the scientist with a few Kodachrome or Ektachrome slides that drive home the whole point he wants to make.

Matter of fact, it was him we developed the process for.

*Eastman Kodak Company, Graphic Reproduction Division, Rochester 4, N. Y., can supply the names of some printers who know all about the "3-color short-run" process.*

## Data for the times

As a kind of public service, we feel we ought to print the table below. We have three reasons for printing it, in decreasing order of importance.

1) In the event of nuclear disaster, pieces of film that survive lighttight might serve as fortuitous dosimeters. Few American population centers of 10,000 souls or more wouldn't contain at least a box or two of such a popular product as *Kodak Royal Pan Film*. Giving it the above-indicated processing normally recommended for that film would provide a radiological survey party with a quick and rough estimate of the amount of prompt radiation that hit where the film was stored. The table neglects the possibility of solarization, but perhaps this is an excessively lugubrious thought.

2) In these nuclear times, the

question often arises of how much radiation it takes to spoil film for its intended purpose. Here is a guide to tolerance judgments, since the sensitivity of a particular photographic material is essentially the same for all radiations harder than 1,000-kvp x-rays.

3) It's an excuse to tick off a few film names you might like to know about. No. 2 is one of the main threads for Hollywood's loom of glamour and glory. No. 3 is sheet film with good tone rendition for monochrome subjects, slow enough for processing by inspection under a relatively bright Series 1 Safelight. No. 4 is the basic sheet film for black-and-white photomicrography. No. 5 has sensitivity out to nearly 10,000Å and comes in widths up to 9½" and lengths up to 390 feet. No. 6 is 16mm and 35mm film for recording repetitive patterns from green-emitting c-r tubes, unaffected by reddish cathode glow. No. 7 is the world's No. 1 film for aerial photography. No. 8 is a sheet film that gives either inky blackness or diaphanous clarity and nothing much between. And No. 9 provides 16mm or 35mm sanctuary for records by the billions.

KODAK FILM	Kodak Developer	Time (min.)	1,000-KVP X-rays— Roentgens for density of		
			0.3 net	1.0 gross	2.0 gross
1. Kodak Royal Pan Film	DK-60a	4	1.2	13.2	440
2. Eastman Plus-X Panchromatic Negative Film	D-76	8	3.7	19	450
3. Kodak Commercial Film	DK-50	5	4.3	47	305
4. Kodak Contrast Process Panchromatic Film	D-11	5	11.5	36	98
5. Kodak Infrared Aerographic Film	D-19	9.6	1.2	4.0	18
6. Kodak Linagraph Ortho Film	D-19	7	1.1	3.2	12
7. Kodak Super-XX Aerographic Film	D-19	9.6	1.2	3.8	17
8. Kodalith Ortho Film, Type 2	Kodalith	2.25	—	1400	1700
9. Recordak Micro-File Panchromatic Film	Kodagraph	5	90	220	560

For more detailed information on the radiation sensitivity of more Kodak films, write Eastman Kodak Company, X-ray Division, Rochester 4, N. Y., who hope that the only film ever given an opportunity to soak up roentgens will be Kodak X-ray Film.

This is one of a series of reports on the many products and services with which the Eastman Kodak Company and its divisions are . . . serving laboratories everywhere

**Kodak**  
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