

positive color reaction with sodium nitroferrieyanide after irradiation for 1 hr with the Hanovia lamp but not before, and not if the radiation was first passed through an acetone filter which absorbs wavelengths shorter than 300 m μ . Because of this finding the isolation of homocysteine was attempted from an irradiated methionine solution. No *S*-benzylhomocysteine could be isolated; only unchanged methionine could be identified. It is possible that methyl mercaptan CH₃SH was formed.

References

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4. HORN, M. J., JONES, D. B., and BLUM, A. E. *Ibid.*, **166**, 313 (1946).
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Manuscript received April 13, 1952.

Comments and Communications

Zoological Nomenclature

AS FROM March 1, 1953, the International Commission on Zoological Nomenclature will start to vote on the following cases involving the possible use of its plenary powers for the purposes specified in brackets against each entry. Full particulars of these cases were published on August 29, 1952, in the *Bulletin of Zoological Nomenclature*, those relating to cases (1) to (4) in Part 10, and those relating to cases (5) to (14) in Part 11 of Vol. 6. (1) *Sphinx* Linnaeus, 1758 (Class Insecta, Order Peidoptera) [designation of type species]; (2) Houttuyn (M. H.), 1787, *Animalium Musei Houttuynensi Index* [suppression]; (3) *Phalaena* Linnaeus, 1758 (Cl. Insecta, Ord. Lepidoptera) [suppression, and validation as of generic status of eight terms used by Linnaeus for groups thereof: *Bombyx*, *Noctua*, *Geometra*, *Tortrix*, *Pyrallis*, *Tinea*, *Alucita*, as from 1758, *Attacus*, as from 1767; and names of families based thereon; alternatively, for *Bombyx* and *Pyrallis* (as from Fabricius, 1775), designation of type species]; (4) *Episema* Oechsenheimer, 1816 (Cl. Insecta, Ord. Lepidoptera) [designation of type species, thereby also preserving *Diloba* Boisduval, 1840]; (5) *cydippe* Linnaeus, 1761, *Papilio*, and *adippe* Linnaeus, 1767, *Papilio* (Cl. Insecta, Ord. Lepidoptera) [suppression, and validation of *adippe* Denis & Schiffermüller, 1775, *Papilio*]; (6) *hispidus* Olivier, 1811, *Palaemon* (Cl. Crustacea, Ord. Decapoda) [validation]; (7) *Sicyonia* Milne Edwards, 1830 (Cl. Crustacea, Ord. Decapoda) [validation]; (8) *Hymenocera* Latreille, 1819 (Cl. Crustacea, Order Decapoda) [designation of type species]; (9) *Pyramidella* Lamarck, 1799 (Cl. Gastropoda, Subclass Prosobranchia) [validation, by suppression of *Plotia* Roeding, 1798]; (10) *Dasypeltis* Wagler, 1930 (Cl. Reptilia) [validation]; (11) *Trichopsylla* Kolenati, 1863 (Cl. Insecta, Ord. Siphonaptera) [suppression]; (12) *pungens* Waleknaer, 1802, *Pulex*, and *vespertilionis* Duges, 1832, *Pulex* (Cl. Insecta, Ord. Siphonaptera) [suppression]; (13) *simus* Linnaeus, 1767, *Coluber* (Cl. Reptilia) [determination of application]; (14) *Mellita* Agassiz, 1841 (Cl. Echinoidea) [validation].

Comments on the above cases should be sent to me as soon as possible.

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Comparative Anatomy, Embryology, and Histology Synthesized

COMPARATIVE anatomy, embryology, and histology of vertebrates are usually separate semester courses in undergraduate schools—an arrangement that results in some duplication of material. For the past four years I have offered at Lawrence College a year course in vertebrate morphology, which attempts to combine the three courses into an integrated whole. After a preliminary study of testis and ovary histology and germ-cell formation, we investigate fertilization, cleavage, and germ-layer formation. Then the various body systems are studied in the following order: skeletal, muscular, nervous, endodermal, urinogenital, and circulatory. For each system the development and the microscopic and gross structure of adult morphology are considered comparatively.

The forms used are frog, chick, and pig embryos; shark, *Necturus*, alligator, and cat adults; and histological sections from the four adult forms. The approach varies with the system. In the skeletal and muscular systems, a brief histological and embryological survey is followed by much more extensive work on comparative anatomy. The embryology of the nervous system is given a great deal of time, with histology and anatomy somewhat less. The endodermal systems emphasize histology most, embryology next, and anatomy less. The embryology and histology of the urinogenital systems are considered together, with anatomy following. In the circulatory system a short study of histology is followed by study of the morphology in the frog embryo, shark, and *Necturus* adults, chick embryo, alligator adult, pig embryo, and cat adult.

Attempts are consistently made to see the finished structure of a system as a result of its ontogenetic and phylogenetic development, and the relation of its gross and microscopic structure to its physiological actions. Such a course presents a more unified and complete grasp of vertebrate morphology than the separate semester courses; it provides a good foundation for an understanding of vertebrate physiology; and it solves many problems of scheduling unevenly prepared students, with repetition of material.

The prerequisite for the course is a year of general biology or general zoology. Nine hours a week for the school year are allotted. Lectures and discussions are not at any set time but come at the beginning and end of each piece of work. On the average between seven and eight of the nine hours are spent in the laboratory.

Although several comparative anatomy teachers predicted difficulty in persuading medical schools to accept such a course, the medical schools consulted were unanimous in their approval, and some were especially encouraging. It is my opinion that the students come away with as much information as before, better and more quickly assimilated because of better understanding of relationships, and therefore more thoroughly retained. The students themselves report the course stimulating and rewarding, involving a great deal of hard work and much satisfaction during and after. Alumni who have gone on to medical school say it has been very helpful and has given them some advantages over those who had separate courses.

There is still much to be done in improving the selection and integration of material and in developing teaching aids. This work is in progress. I recommend the synthesis to the consideration of college biology departments.

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Passport Procedures

THE Department of State today (Sept. 2, 1952) made public certain new regulations pertaining to the issuance of United States passports. The regulations cover those cases which involve questions of possible subversive activities on the part of the applicant.

These regulations are designed (1) to provide for more formalized procedures within the Passport Division in cases where there is a question as to whether or not an applicant's request for a passport should be granted, and (2) to provide an applicant whose request for a passport is denied with the opportunity to appeal the adverse decision before a newly created Passport Appeals Board. At the same time, the revised regulations specify standards under which the decision to deny an application for a passport will be made.

Under the revised procedures, when derogatory information exists which, unless clarified, would result in the denial of a passport, an applicant will be notified of this fact in writing. He will also be notified:

of the reasons, as specifically as security regulations permit, upon which the tentative decision to deny the passport has been made;

of his right to discuss his application in a hearing with the Passport Division;

of his right to be represented by Counsel at this hearing, and to present additional evidence.

If the decision is unfavorable, the unsuccessful applicant will be notified of his right to appeal to the Passport Appeals Board, whose membership will include at least three Department officers who have not been previously concerned with the case.

Text of the new regulations follows:

CODE OF FEDERAL REGULATIONS TITLE 22—FOREIGN RELATIONS

Chapter I—Department of State Part 51—Passports

Subpart B—Regulations of the Secretary of State

Pursuant to the authority vested in me by paragraph 126 of Executive Order No. 7856, issued on March 31, 1938 (3 F.R. 681; 22 CFR 51.77), under authority of section 1 of the Act of Congress approved July 3, 1926 (44 Stat. 887; 22 USC 211 (a)), the regulations issued on March 31, 1938 (Department Order 749) as amended (22 CFR 51.101 to 51.134) are hereby further amended by the addition of new sections 51.135 to 51.143 as follows:

51.135 *Limitation on Issuance of Passports to Persons Supporting Communist Movement.* In order to promote the national interest by assuring that persons who support the world Communist movement of which the Communist Party is an integral unit may not, through use of United States passports, further the purposes of that movement, no passport, except one limited for direct and immediate return to the United States, shall be issued to:

(a) Persons who are members of the Communist Party or who have recently terminated such membership under such circumstances as to warrant the conclusion—not otherwise rebutted by the evidence—that they continue to act in furtherance of the interests and under the discipline of the Communist Party.

(b) Persons, regardless of the formal state of their affiliation with the Communist Party, who engage in activities which support the Communist movement under such circumstances as to warrant the conclusion—not otherwise rebutted by the evidence—that they have engaged in such activities as a result of direction, domination, or control exercised over them by the Communist movement.

(c) Persons, regardless of the formal state of their affiliation with the Communist Party, as to whom there is reason to believe, on the balance of all the evidence, that they are going abroad to engage in activities which will advance the Communist movement for the purpose, knowingly and willfully of advancing that movement.

51.136 *Limitations on Issuance of Passports to Persons Likely to Violate Laws of the United States.* In order to promote the national interest by assuring that the conduct of foreign relations shall be free from unlawful interference, no passport, except one limited for direct and immediate return to the United States, shall be issued to persons as to whom there is reason to believe, on the balance of all the evidence, that they are going abroad to engage in activities while abroad which would violate the laws of the United States, or which if carried on in