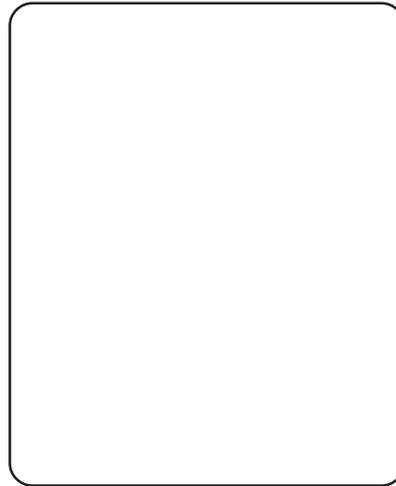


UNESCO Kalinga Prize Winner-1959

JEAN ROSTAND
(MAN OF TRUTH)

[Paris, October, 30, 1894- City - in Avray, September, 4, 1977]



Jean Rostand

Lamponist, Moralist, Historian of the Life Sciences, Biologist, Popularizer Scientific, Pacifist, Humanistic, Anticlerical... Jean Rostand (1894-1977) was all that. Let us add that he was also Free Thinker (and even Honorary President of the Free Thinking) and that, throughout his existence devoted to the Research of the Truth, he made watch of an Intellectual Honesty out of the common run and of an exceptional Broadmindedness. One can regard as greatest wise XXe century this man who was never proof of least sectarianism.

**“ INDEPENDENCE OF The MIND, RESPECT
OF The MAN, LOVE OF TRUTH...**

**THAT ONE DOES NOT AWAIT EGO THAT,
CLOSE COMPLETING Me, I DISAVOW The
FEW IDEAS OF WHICH I LIVED A1. ”**

BIOGRAPHY OF JEAN ROSTAND

Artist, Biologist, Writer and Scientist (French)

[Paris, October 30, 1894-City-in Avray September 4, 1977],

French Biologist and Philosopher.

Jean Rostand - Biologist, Historian of Sciences, Philosophize, Essayist

Born in Paris, October 30, 1894.

Jean Rostand was wire of the playwright Edmond Rostand, Member of the French Academy. He was attracted towards sciences more than towards the letters, although endowed with an excellent feather, he obtained his science degree and, being discovered a true passion for biology, he worked during the First World War in the laboratory of professor Vincent on the vaccine antithyphic.

He has taken part in 1936 with creation of section of biology with Palate of Discovery, he organized with City of Avray his own laboratory, where he must himself devote on the Amphibian with some many research, concerning in particular with field of parthenogenesis and of gynogenèse, where he made some significant discoveries.

He is the author of an exceptionally abundant scientific work which includes/understands: *Chromosomes, craftsmen of heredity and the sex, Of the fly to the man, Formation to be it, State present of the transformism, Evolution of the species, Of the germ to the new-born baby, life of the clamping plates, Problems of heredity and the sex, the new-born baby to the adult, Of the adult to the oldman, life of the dragonflies, New Biology, parthenogenesis of vertebrate, Biology and medicine, Heredity and Racism, life and its prophets, bridal Manners of the animals, Science and Generation, the Man, new Ideas of the genetics, Genesis of the life, life of history of biology, the Future of biology, the animal Parthenogenesis, Biology and the human Future, the Origins of animal biology and the Spallanzani abbot, the Large currents of biology, the Genetics of the batrachians, human Heredity, To inform on the man, the Life this adventure, the Clamping plates, Frogs and some major biological problems, Can one modify the man ?, The Atomism in biology, false Science and distort sciences, Pensées of a biologist, Nouvelles thoughts of a biologist.*

Picturesque figure but by certain sides brilliant of the scientific world, Jean Rostand could be essential like a researcher original and independent of a great independence of mind, in margin of the university and official circuits to which he preferred his studious retirement of Town of Avray. He could be a writer of talent when he was devoted, out of science, with his taste for the letters. One for this reason owes him several novels and tests, among which the future will retain especially *Pages of a moralist*. It is the moralist who he was more and more, when he advanced in age.

After a first white election, May 22, 1958, in full political crisis, where he obtained only 18 votes against the Charpentier barristers president with the armchair of Claude Farrère, Jean Rostand was elected with the French Academy on April 16, 1959, by 17 votes with the armchair of Édouard Herriot. He was accepted on November 12, 1959 by Jules Romains.

Died on September 4, 1977.

DETAILED BIOGRAPHY :

Active as an experimental biologist, Rostand became famous for his work as a science writer, as well as philosopher and activist. His scientific work covered a variety of biological fields such as amphibian embryology, parthenogenesis and teratogeny, while his literary output extended into popular science, history of science and philosophy.

He was the son of playwright Edmond Rostand and poetess Rosemonde Gérard.

Following the footsteps of his father, Rostand was elected to the prestigious Académie française in 1959.

Rostand was a dynamic activist in several causes, in particular against nuclear proliferation and the death penalty. An agnostic, he demonstrated deep humanist convictions. He wrote several books on the question of eugenism and the responsibilities of mankind regarding its own fate and its place in nature.

He married Andrée Mante in 1920. His son François was born the next year.

Selected works :

- ◆ Le retour des pauvres, **1919-Return of the poor**
- ◆ La loi des riches, **1920-The law of the rich**
- ◆ Pendant qu'on souffre encore, **1921-While suffering endures**
- ◆ Ignace ou l'Ecrivain, **1923-Ignace or the writer**
- ◆ Deux angoisses : la mort, l'amour, **1924-Two anguishes : love and death**
- ◆ De la vanité et de quelques autres sujets, **1925-Of vanity and several other subjects**
- ◆ Les familiotes et autres essais de mystique bourgeoise, **1925-The familiotes and other essays of the bourgeois mystique.**
- ◆ De l'amour des idées, **1926-On the love of ideas**
- ◆ Le mariage, **1927-Marriage**

- ◆ Valère ou l'Exaspéré, **1927-Valère or The exasperated**
- ◆ Julien ou Une conscience, **1928-Julien or A conscience**
- ◆ Les chromosomes, artisans de l'hérédité et du sexe, **1929-Chromosomes, artisans of heredity and sex**
- ◆ De la mouche à l'Homme, **1930-From fly to man**
- ◆ L'état présent du transformisme, **1931-The current state of transformism**
- ◆ Journal d'un caractère, **1931-Journal of a character**
- ◆ L'Évolution des espèces, **1932-The evolution of species.**
- ◆ Les problèmes de l'hérédité et du sexe, **1933-The problems of heredity and sex**
- ◆ L'aventure humaine, **1933-The human adventure**
- ◆ La vie des libellules, **1935-The life of dragonflies**
- ◆ Insectes, **1936-Insects**
- ◆ La nouvelle biologie, **1937-The new biology**
- ◆ Biologie et médecine, **1938-Biology and medicine**
- ◆ Hérité et racisme, **1938-Heredity and racism**
- ◆ Pensée d'un biologiste, **1938-Thoughts from a biologist**
- ◆ La vie et ses problèmes, **1938-Life and its problems**
- ◆ Science et génération, **1940-Science and generation**
- ◆ Les idées nouvelles de la génétique, **1941-New ideas in genetics**
- ◆ L'Homme, introduction à l'étude de la biologie humaine, **1941-Man, introduction to the study of human biology**
- ◆ L'Homme, maître de la vie, **1941-Man, master of life**
- ◆ Hommes de vérité , **1942-Men of truth**
- ◆ L'avenir de la biologie, **1943-The future of biology**

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- ◆ La genèse de la vie, histoire des idées sur la génération spontanée,
1943-Genesis of life, a history of the ideas on spontaneous generation
- ◆ La vie des vers à soie,
1944-The life of silkworms
- ◆ Esquisse d'une histoire de la biologie,
1945-Sketch of a history of biology
- ◆ L'avenir de la biologie,
1946-The future of biology
- ◆ Qu'est-ce qu'un enfant ?,
1946-What is a child ?
- ◆ **Chales Darwin, 1947**
- ◆ Nouvelles pensées d'un biologiste,
1947-New thoughts from a biologist
- ◆ L'hérédité humaine,
1948-Human heredity
- ◆ Hommes de vérité II,
1948-Men of truth II
- ◆ La biologie et l'avenir humain,
1949-Biology and the human future
- ◆ L'Homme devant la biologie,
1949- Man facing biology
- ◆ La parthénogenèse, reproduction virginale chez les animaux,
1949-Parthenogenesis, virginal reproduction in animals
- ◆ La parthénogenèse animale,
1949-Animal parthenogenesis
- ◆ La génétique des batraciens,
1951-Batracian genetics
- ◆ Les grands courants de la biologie,
1951-Great trends in biology
- ◆ Les origines de la biologie expérimentale et l'abbé Spallanzani,
1951-The origins of experimental biology and the abbott Spallanzani
- ◆ L'hérédité humaine,
1952-Human heredity
- ◆ Pages d'un moraliste,
1952-Pages by a moralist
- ◆ Ce que nous apprennent les crapauds et les grenouilles,
1953-What toads and frogs teach us
- ◆ La vie, cette aventure,
1953-Life, that adventure
- ◆ Ce que je crois,
1953-What I believe
- ◆ Instruire sur l'Homme,
1953-To instruct on Man
- ◆ Notes d'un biologiste,
1954-Notes from a biologist
- ◆ Les crapauds et les grenouilles et quelques grands problèmes biologiques,
1955-Toads, frogs and a few great problems in biology
- ◆ Le problème biologique de l'individu,
1955-The biological problem of the individual
- ◆ L'Homme en l'an 2000,
1956-Man in the year 2000
- ◆ Peut-on modifier l'Homme ?,
1956-Can we modify Man ?
- ◆ L'atomisme en biologie,
1956-Atomism in biology
- ◆ Bestiaire d'amour,
1958-A bestiary of love
- ◆ Aux sources de la biologie,
1958-At the sources of biology
- ◆ Anomalies des amphibiens anoures,
1958-Anomalies of anurian amphibians
- ◆ Science fausse et fausses science,
1958 - Erroneous science and false science.
- ◆ Les origines de la biologie expérimentale,
1959-Origins of experimental biology
- ◆ Carnet d'un biologiste,
1959-Notepad of a biologist
- ◆ Espoirs et inquiétudes de l'homme,
1959-The hopes and worries of Man.



JEAN ROSTAND - BIOGRAPHICAL SKETCH

Biography of Jean Rostand :

Son of the playwright Edmond Rostand and the poetess Rosemonde Gerard. Filled with enthusiasm by his readings of the entomologist Jean-Henri Fabre, Jean Rostand is interested more in sciences with the literature. Bachelor of sciences of the Faculty of Paris, Jean Rostand settles with City-in-Avray in 1922, after death of his father. After having taken part in the creation of the section of biology to the Palace of the Discovery, in 1936, he melts with City-in-Avray his own independent laboratory and keeps away of the university structures that he judges too constraining. Very interested by the origins of life, he studies the biology of the batrachians (frogs, toads...), the parthenogenesis, the action of the cold on eggs... and he is the promoter of multiple research on heredity.

Jean Rostand starts by publishing some philosophical tests then divides his time between his trade of researcher and a very abundant scientific and literary production. With conviction and enthusiasm, he endeavours to popularize biology near a large audience and to alert the opinion on the gravity of the human problems which he poses. Regarding biology as having to be carrying a moral, it warns against the dangers which threaten the men when they play sorcerer's apprentices.

Biologist, man of science, lampoonist, moralist, Jean Rostand is also pacifist (he militates against the atomic armament). He is a convinced atheist, free thinker (honorary president of the Freethinking). Without ever showing sectarianism, he shows a very large broadmindedness and intellectual honesty.

Jean Rostand with the French Academy in 1959 continues his information campaigns at the time of conferences, with the radio or television.

Bibliography in addition to an abundant scientific work:

Two anguishes: death and the love (1923), Of vanity and some other subjects (1927), the man (1940), Pages of a moralist (1952), which I believe (1953), Notes of a biologist (1954), Pensées of a biologist (1954), Carnet of biologist (1959), Inquiétudes of a biologist (1967), God do exist ? Not... (1973).

Jean ROSTAND born in 1894, son of Edmond Rostand, celebrated writer and of Rosemonde Gerard, poetess of reputation. Attracted towards sciences more than towards the letters, he was interested very early in the writings of Jean-Henri Fabre, then with work of Eugene Bataillon. He says on this subject, in his book "what I believe":

"Also when I read these" entomological Memories "of Fabre, which had been offered to me by my parents, my spirit accepted from it a revealing shock... thanks to Fabre, a field opened, which excited in me a real curiosity, the taste, the love replaced the constraint. That amused me, but it was

more than one recreation. It was still of the order of the play, but it was better than a play".

After his licence of natural science, he works during the First World War in the laboratory of professor Vincent on the vaccine antityphic. He begins a work on the parthenogenesis for his thesis.

Concerned about the origins of life, he was devoted to the experimental parthenogenesis since 1924. He knew to return account, in a very clear language, of his work and to express their philosophy in several works, in order to popularize biology.

He takes part, in 1931, with the creation of the section of biology to the Palate of the Discovery, and organizes in Ville of Avray his own laboratory, in order to devote himself to his research on the Amphibians, in particular with the parthenogenesis and the gynogenèse, where he made the significant discovered ones. He directed three collections to the Gallimard Editions: "Future of science", "natural Stories" and "Large pages of science".

Moreover, his action of researcher leads him towards significant projections like the doubling of the chromosomes in 1928, the first tests on the cloning in 1943, the revelation of the action of glycerin in the conservation of sperm at low temperature in 1946, as well as the description of the vector of the causal agent of the anomaly P in frog between 1947 and 1970.

He receives the Prize of the Academy of Science, the Great Literary Prize of the Town of Paris (1952), the prize of the foundation Singer-Polignac (1955), the international Kalinga Prize for scientific popularization (1959).

Member of the Company of Biology, of the zoological Company of France, the Institute of Embryologie of the International Academy of History of Sciences, Jean Rostand was elected to the French Academy on April 16, 1959.

He is the author of an abundant scientific work, (the human adventure, three volumes, 1933-1935; Sciences and generation, 1940; Genesis of the life, history of the ideas on the spontaneous generation, 1943; Genetics of the batrachians, 1951; Human heredity, 1952, etc.) but also of the novels and the tests.

Jean Rostand dies in September, 4, 1977.



Biography of Jean Rostand in Chronological Order

- 1894 :** Birth Jean ROSTAND, wire of the playwright Edmond ROSTAND and the poetess Rosemonde GERARD, October 30 in Paris.
- 1900 :** Installation of family ROSTAND in Cambo (Pyrénées-Atlantiques), in the villa "Arnaga".
- 1904 :** He reads the entmological Memories of Jean-Henri FABRE, "Homère of the insects", and corresponds with him.
- 1907:** Jean ROSTAND receives in gift a microscope.
- 1911 :** He passes his baccalaureat (Philosophie series). He installs a small laboratory in Arnaga.
- 1912 :** Work of physiology with Doctor LHERMITTE, head of private clinic in Salpêtrière: injection of hormones to lapines to cause male births, in the laboratory of Arnaga.
- 1913 :** He follows courses in Sorbonne and obtains the certificates of general physiology and biological chemistry.
- 1914 :** He passes the certificate of mineralogy
- 1915 :** Affected to the laboratory of professor VINCENT, where the vaccine prepares antityphic, He passes the certificates of botany, histology, general embryology...
- 1916-1917:** He studies the reproductive cycle of the larvae of the Miastor Fly at the laboratory of the evolution of the organized beings, under the direction of professor CAULLERY.
- 1920 :** Marriage with Andree MANTE, his German cousin. He clarifies the parasitism of Dipterous on a Mollusc (first publication in

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- the Bulletin of the entomological Company of France)
- 1921** : Birth of his François son.
- 1922** : Installation of the couple with City-in Avray. He studies the habitat of the larvae of Miastor.
- 1924** : Jen Rostand studies the intersexuality of Phasmes and traumatic parthenogenesis.
- 1925** : He makes his first communication at the Company of Biology about inoculation of sperm desiccated in Frog egg. He considers work of geneticist MORGAN.
- 1926** : Communication on the cephalic Clerc's Office in the Insects.
- 1927** : He starts to correspond with Eugene BATTALION and undertakes work on the binding of eggs of Fly.
- 1928** : He publishes the chromosomes, craftsmen of heredity and the sex. It is the beginning of his career of scientific popularizer.
- 1929-1930** : Communications on hybridization between various Clamping plates of the Bufo kind.
- 1933** : The first work on the action of the cold on the chromosomal doubling of parthenogenetic Frog egg.
- 1934** : Work on the gynogénèse: fecundation of an ovule by an irradiated spermatozoïde, having thus lost its genome.
- 1936** : Jean Rostand takes part in the creation of the section of biology to the Palate of Discovered (Paris).
- 1939-1942** : 3rd tude of the action of the cold on the development of egg in the Batrachians and resistance to the egg cold of Batrachians and Insects.
- Source - Thoughts of a biologist .*
- 1943-1946** : Various work on eggs of Amphibians
- (inoculation of embryonic cores in virgin Frog eggs, induction of triploidy in fertilized eggs, inhibition of the segmentation of egg by ribonuclease injection, discovered action of glycerin on the resistance of the cells to the congelation named since "Rostand effect")
- 1947** : Discovered hereditary polydactyly in the Clamping plate. Gynogénèse by egg cooling in the Batrachians.
- 1948-1949** : Work on the natural polydactyly of green Frog. Work on the conservation of ovules: treaties by the cold and reimplanted in the abdomen of the animal, they can be laid and fertilized.
- 1950** : Study of the chimiotératogénèse in the Batrachians. Jean Rostand becomes member of the Zoological Company of France.
- 1951-1952** : Study of the genetic anomalies in the Tailless Amphibians. Discovered anomaly P in green Frog (supposed teratogenic effect of a virus). He receives the Great literary Prize of the Town of Paris.
- 1953** : He publishes Instruire on the man where it tackles the mitchourinism, theory supported by Lyssenko, adversary of the genetics. He becomes Honorary president of the Zoological Company of France.
- 1955** : He receives the Great Prize of the Singer-Polignac Foundation. Study of the teratogenic effects of the ultraviolet rays on Frog egg.
- 1959** : Jean Rostand is elected with the French Academy with the head office of Edouard Herriot.
- Source - Notebook of a biologist.*
- 1964-1966** : He intervenes at the time of the Congress against the Atomic armament and militates against the nuclear weapon,

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the death penalty and in favour of the democratization of teaching...

1967 : *Concerns of a Biologist.*

1968-1972 : Publications concerning the anomaly P and the changes in green Frog.

1975 : He obtains the Prize of the 3rd ducation decreed by the Institute of the Life of the Foundation of the MGEN (Mutual General of the 3rd ducation Nationale).

1977 : With the initiative of Jean ROSTAND, Haroun TAZIEFF..., creation of the Antinuclear International Face against the nuclear thermal power stations. He attends the Congress of the Freethinking, of which he is a Honorary president.

Jean Rostand died on September 4, 1977 at City-in-Avray.