

There's **something**
special
in the air



Nobilis[®] MG 6/85

The safer live MG vaccine



Mycoplasma gallisepticum

“MG... a ticking time bomb”

Glisson J, 1995

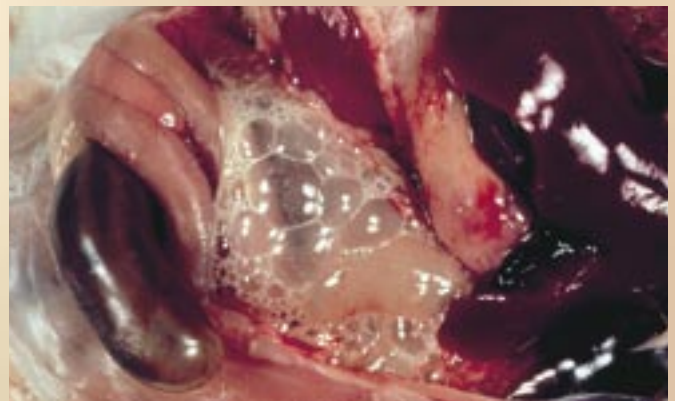
MG infection

Mycoplasma gallisepticum⁽²⁾

- Worldwide prevalence
- Vertical and horizontal transmission
- Both young and mature birds are susceptible
- Flocks are infected for life

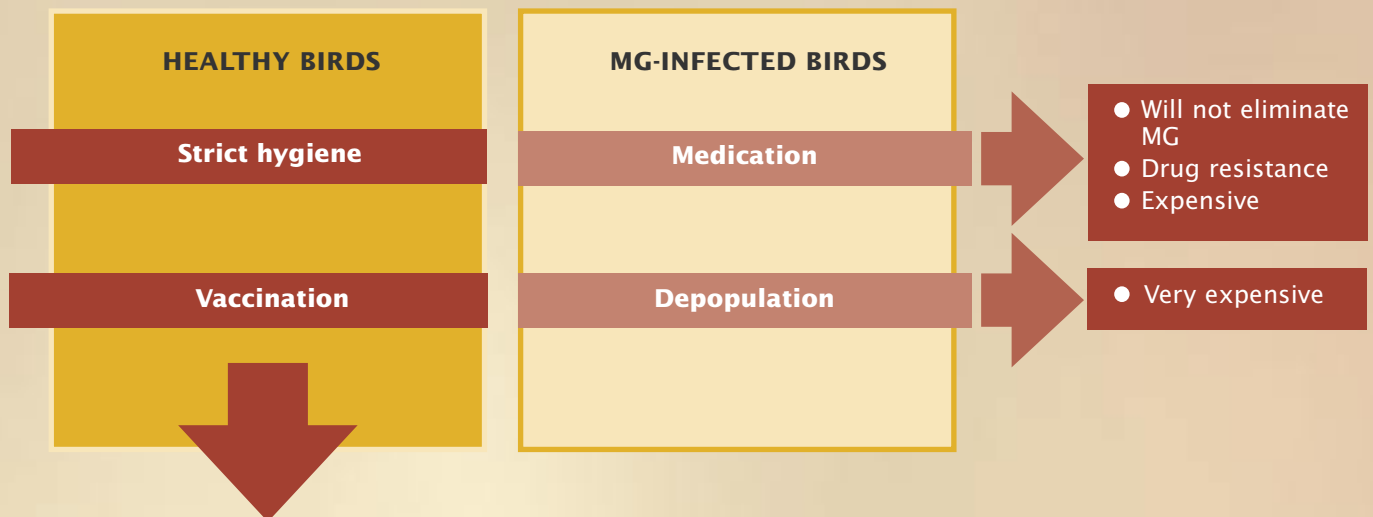
Clinical signs⁽²⁾

- Affects the respiratory system
- Reduced weight gain and feed efficiency
- Egg production losses of up to 16 eggs per hen⁽³⁾
- Secondary infections may cause fatal complications



Airsacculitis caused by MG infection

Control measures



Vaccination objectives

- Protection against clinical signs
- Prevention of egg production losses

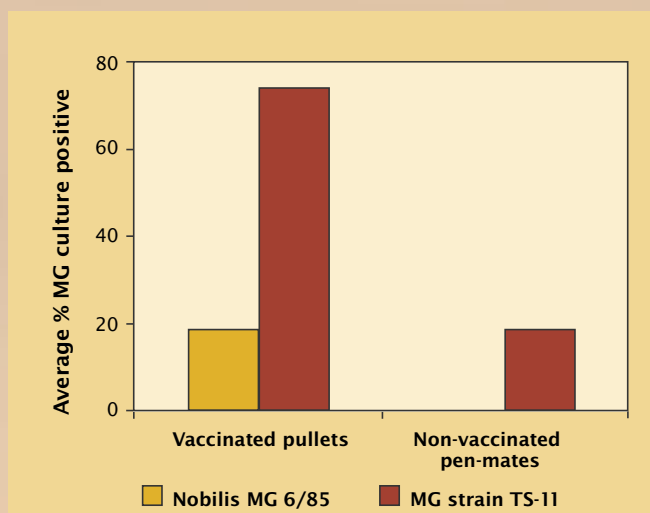
Nobilis® MG 6/85

Extremely safe

Non-pathogenic MG strain

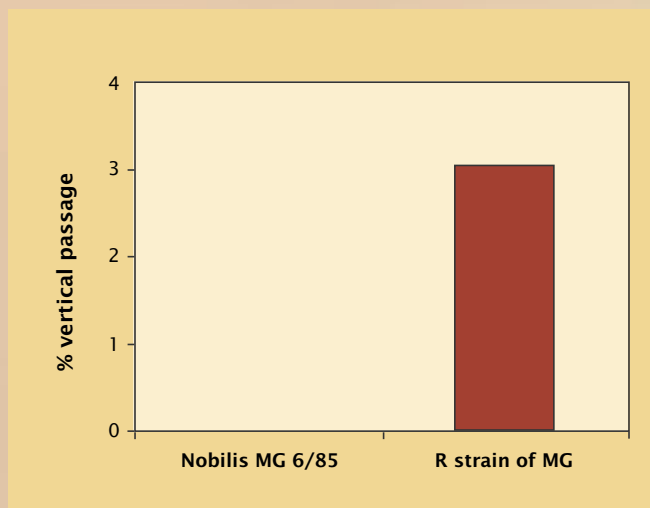
- The MG 6/85 strain is genetically stable and non-pathogenic for chickens and turkeys
- Chickens and turkey poults inoculated with the MG 6/85 strain show minimal reaction⁽⁴⁾

No horizontal or vertical transmission



No horizontal transmission

- Layer pullets were administered live Nobilis MG 6/85 (by fine spray) or commercially-produced live MG strain TS-11 (by eye drop)
- Vaccinates were housed with non-vaccinated pen mates for 15 weeks. Non-vaccinated sentinel chickens and turkeys were housed in adjoining pens
- Each bird was sampled for MG cultures at 3-week-intervals post vaccination to test transmissibility
- Nobilis MG 6/85 did not spread to any of the non-vaccinated sentinel birds and pen-mates, in contrast to strain TS-11⁽⁵⁾



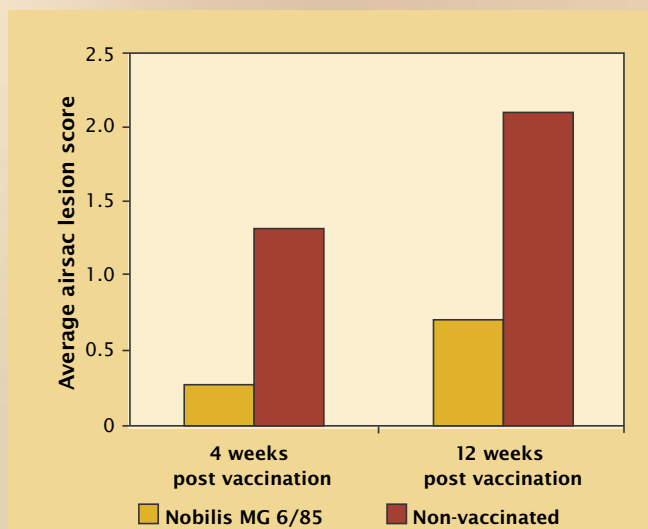
No vertical transmission

- White layers were vaccinated with live Nobilis MG 6/85 or the virulent R strain of MG (both by fine spray)
- Vertical transmission was examined by using egg culture
- Transovarian passage occurred in approximately 3% of eggs following challenge to the R strain⁽⁶⁾
- No vertical transmission occurred in Nobilis MG 6/85-vaccinated birds

Nobilis® MG 6/85

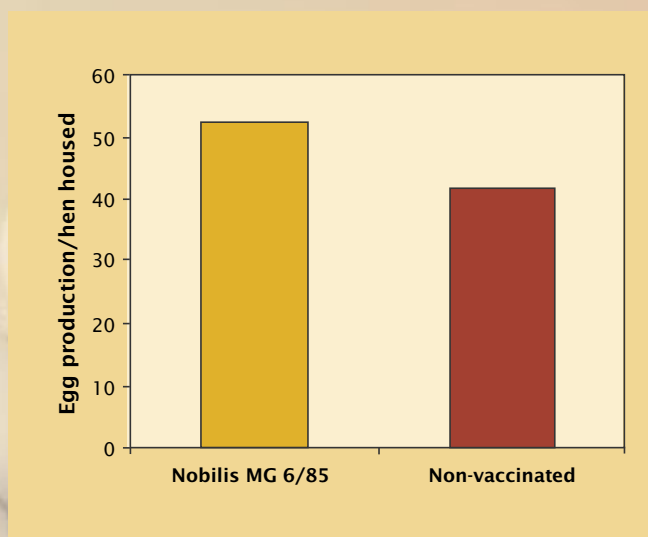
Protects against virulent MG challenge

Effective protection against clinical signs



- A group of white layers was vaccinated by fine spray with live Nobilis MG 6/85; one group served as non-vaccinated controls
- Both groups were challenged with the virulent R strain of MG, 4 and 12 weeks after vaccination
- Protection was determined by scoring airsac lesions on a scale of 0 to 4
- In contrast to the non-vaccinated controls, the Nobilis MG 6/85-vaccinated layers were well protected against challenge at both 4 and 12 weeks after vaccination⁽⁴⁾

Helps to prevent egg production losses

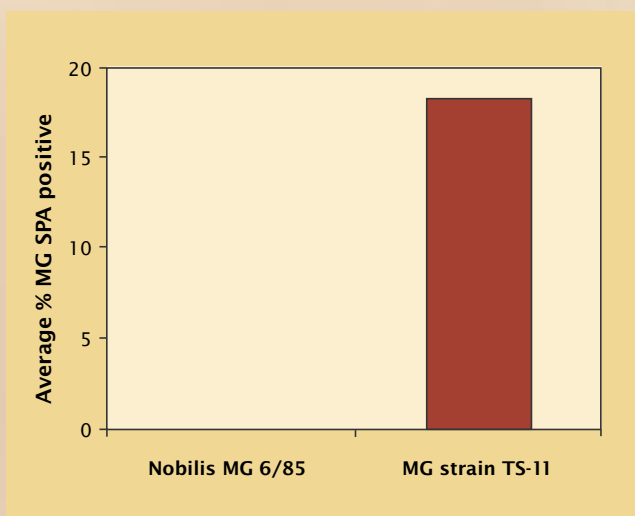


- A group of white layers was vaccinated at 10 weeks of age with live Nobilis MG 6/85 (by fine spray); one group remained non-vaccinated
- Both groups were challenged with a virulent R strain of MG at 30 weeks of age
- Egg production was monitored from 5 weeks before challenge to 20 weeks after challenge
- Over 25 weeks, birds vaccinated with Nobilis MG 6/85 produced almost 12 eggs/hen housed more than non-vaccinated controls⁽⁷⁾

Nobilis® MG 6/85

Serological differentiation from field strains

Generally no seroconversion using the SPA test⁽⁵⁾



- Layer pullets were administered live Nobilis MG 6/85 (by fine spray) or commercially-produced live MG strain TS-11 (by eye drop)
- Serum of each pullet was tested by the serum plate agglutination (SPA) test for MG antibodies at 3-week-intervals post vaccination for a period of 15 weeks
- Results clearly show that the SPA test was negative for any Nobilis MG 6/85-vaccinated pullet at any samplingpoint, in contrast to TS-11-vaccinated birds⁽⁵⁾

CONCLUSION:

Nobilis MG 6/85 does not induce seroconversion, using the serum plate agglutination test, in layer pullets^(*). This allows serological differentiation between chickens infected with field strains of MG and those vaccinated with Nobilis MG 6/85.

* SPA reactions can occur in rare cases



Nobilis® MG 6/85

Easy administration

Mass application

Route of entry of the vaccine is through the upper respiratory tract of the bird and the vaccine must therefore be delivered to this area.

Instead of the labour intensive eye drop method, Nobilis MG 6/85 should be administered by a fine spray of less than or equal to 20 microns.

Vaccination schedule

Vaccination possible from 6 weeks of age onwards

Remark: Vaccination is only beneficial if birds are not already infected with MG

Description

Nobilis MG 6/85 is a live freeze-dried vaccine containing the MG 6/85 strain of *Mycoplasma gallisepticum*. The vaccine contains at least 10⁷ CFU per dose.

Indication

Nobilis MG 6/85 is indicated for the active immunisation of chickens for protection against clinical signs of *Mycoplasma gallisepticum* infection.

Administration

The vaccine should be administered by a fine spray of less than or equal to 20 microns.

Presentation

Nobilis MG 6/85 is available in 1,000-dose presentations.



References

1. Glisson J, 1995. World Poultry 2: 95
2. Yoder HW, 1991. In: Diseases of poultry 9th ed: 198-211
3. Mohammed HO et al., 1987. Avian Dis 31: 477-482
4. Evans RD & YS Hafez, 1992. Avian Dis 36: 197-201
5. Ley DH et al., 1997. Avian Dis 41: 187-194
6. Lin MY & SH Kleven, 1981. Avian Dis 26: 487-495
7. Evans RD et al., 1992. Avian Dis 36: 956-963

Intervet Research Makes The Difference